

'It's Important to Know In Time'

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The Newspaper of the Industry

Air Conditioning & REFRIGERATION

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Victory Program Meeting Plans In Midwest Set

Cincinnati Is Host Oct. 26; Second Coast Meeting Wins New Supporters

CINCINNATI—Henry A. Dinegar of the War Production Board is to be one of the featured speakers at the Victory Program rally of the air conditioning and refrigeration industry here Oct. 26.

Auditorium in which the meeting will be held will be announced in the next 'Bulletin' issue of the NEWS.

Other speakers on the program include John K. Knighton, Director of the Victory Program; A. B. Schellenberg, president of Alco Valve Co. and secretary of the Refrigeration Equipment Manufacturers Association; P. B. Zimmerman, vice president of the Airtemp Division of Chrysler Corp., and George F. Taubeneck, editor and publisher of AIR CONDITIONING & REFRIGERATION NEWS.

In the morning preceding Victory Program rally the Standard Refrigeration Compressor Association will



Henry Dinegar of the WPB, recently returned from England, will speak at Cincinnati meeting.

meet at the Netherlands Plaza hotel. Other manufacturers' associations may also convene concurrently.

Local sponsors of the rally are the Refrigeration and Air Conditioning Association of Cincinnati, and the Cincinnati section of the American Society of Refrigerating Engineers.

All members of the industry—service men, contractors, jobbers, dealers, manufacturers, engineers—are invited to attend this gathering to discuss conservation and cooperation with the War Production Board.

Successful Victory Program industry rallies have recently been concluded in Los Angeles and San Francisco.

SAN FRANCISCO—Charles H. Merrill, president of the Refrigeration Group of San Francisco, was chairman of the Victory Program rally here on the night of Sept. 30 at the Bellevue hotel. More than a hundred members of the industry from this locality came to hear the program. J. E. Schnell of the War Production Board, Los Angeles, was also present.

Others on the program included J. K. Knighton, director of the Victory Program; Clarence F. "Sandy" Pratt, San Francisco jobber; R. O. White, Day & Night Manufacturing Co., and C. A. Miller, Servel, Inc.

As a typical example of the measures which this industry has taken to conserve strategic metals, Mr. White cited the water cooler manufacturers, who are now using a low side employing no copper at all, and who have reduced the copper requirements of a self-contained unit from 54 pounds to five pounds.

Who's Entitled To Recaps and How To Proceed To Get Them

C. A. Miller of Servel, Tire Rationing Board Member, Says 'Chances Good If You Know the Regulations'

LOS ANGELES—In a meeting held here at the Biltmore hotel the morning of Sept. 25, preceding the West Coast Victory Program session, members of the refrigeration and air conditioning industry in this area discussed several current problems facing all of them and layed plans to iron out some of these problems.

Highlights of the meeting were talks by C. A. Miller, Servel, Inc., representative from San Francisco and member of the Oakland, Calif. Tire Rationing Board, who spoke on the effects of tire rationing on the refrigeration trade, a talk by Jess E. Rausch, vice president, California Refrigerator Co., San Francisco, who talked on the need for a plan of inventory redistribution in the West Coast area, and an audience participation clinic on priority problems conducted by A. H. Reinach, priorities expert of the Los Angeles WPA.

As a result of the session, conducted by Clarence F. (Sandy) Pratt, president of the California Refrigerator Co., committees were nominated to work out plans for allocations of refrigeration service calls on a regional basis, and to study the problems of redistribution and make recommendations for a permanent organization to handle this important task.

Mr. Miller, as a member of the refrigeration industry, was particularly helpful in his comments on the functions, duties, and operation of the OPA Tire Rationing setup.

"The sole purpose of the Tire Rationing Boards throughout the country," said Mr. Miller, "is to conserve rubber."

Speaking of the selection of individuals to be members of the boards, Mr. Miller explained that the present plan calls for the selection of a committee of at least three men for each 50,000 population. Earlier boards, covering greater numbers of people were not satisfactory, he stated, because of the impossibility of such boards to become thoroughly acquainted with the problems of all groups represented in their board areas.

Referring to the functions of the local boards, Mr. Miller said, "We are not a damned bit concerned about

getting persons from their homes to their offices." Since this has proved to be a consideration in tire requests by war industry personnel, Mr. Miller's statement was taken to apply only to individuals in the refrigeration industry.

Outlining the functions and operation of the Board, Mr. Miller continued "If you are a refrigeration serviceman operating a passenger automobile from your home, and using it 90% or more on business, you are entitled to so-called Victory Rubber recaps, containing 90% reclaimed rubber and good for up to 5,000 miles of slow driving. But in making such allotments, the Board's first question is 'How much of this man's driving is for essential business and how much of it is for pleasure?'"

If you are a serviceman operating a truck," he went on, "you will probably get quicker action on your request, and will probably get new tires, if needed, instead of recaps. If you do get only recaps, based on the condition of your present tires, of course, you will get good rubber in these recaps rather than those made of Victory Rubber."

The approval of your application does not, however," he continued, "assure you of getting either recaps or new tires. That depends on the quota allowed your individual area for the period, and the relative urgency and use to the war effort of applications received in your territory."

Since many Boards are not thoroughly familiar with the operation of the refrigeration industry, and most boards do not have members active in the industry, Mr. Miller suggested that applicants thoroughly familiarize themselves with the rationing regulations in order to stand on their claims for recaps or new tires.

"In my opinion," he remarked, "everyone servicing refrigeration equipment is eligible for recaps."

Under List A of Section 405 in the Rationing regulations, Mr. Miller referred listeners to rules F-1 and F-2 and under Section 501, List B, to regulations covering use of passenger

(Concluded on Page 13, Column 1)

Distributors Convene At Kelvinator Plant To See War Work

DETROIT—Kelvinator distributors and zone managers got an inspiring first-hand impression of what 'Democracy's Arsenal' is doing when the company held its first war-time convention at the Book-Cadillac here last week. The entire distributing organization of Nash-Kelvinator was brought in for the four-day meeting, which included an inspection tour of the company's Propeller division plants in Lansing, it is announced by Frank R. Pierce, vice-president.

"We wanted to give our organization first-hand knowledge of the tremendous war job the industry is doing," Pierce declared. "These men, in common with all automotive and refrigeration dealers, have accepted the sacrifices and financial hardships of these wartimes and at the same time have kept their faith in themselves, in the future of their business and in the inevitable victory."

Pierce pointed out that the meetings also served as a get-together to discuss future plans, particularly in respect to the maintenance and strengthening of the dealer organization for the time when domestic business is resumed.

England's Parliament Prods War Ministers On Tank Cooling

LONDON, England—A "panel for tank investigation" to inquire into the possibility of improving the interior atmosphere of a military tank by air conditioning has been established by the English government, and there has been discussion of the matter in Parliament.

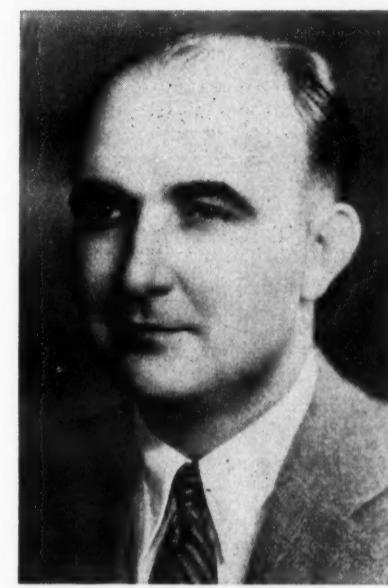
Considerable interest was raised in the matter this past summer when the Germans claimed superiority in desert warfare by virtue of having air conditioned tanks, among other things.

In one session of Parliament the Minister of Production was asked whether he had obtained actual statistics or reports from men engaged in the operations enabling him to state definitely whether the British tanks in Egypt were as cool as those used by the Germans.

The Minister of Production, Mr. Oliver Lyttelton, replied in the negative. He was then asked for the names of the members of the panel set up to inquire into the possibility of improving the ventilation of tanks

(Concluded on Page 13, Column 3)

Moves Up



HARRY NEWCOMB

Newcomb Is Servel Vice President

EVANSVILLE, Ind.—Harry Newcomb has been elected a vice president of Servel, Inc., Louis Ruthenburg, president of the company, announced last week. His election follows eight years of service with the organization.

In addition to assuming his new duties, Mr. Newcomb will continue as general manager of Servel's electric refrigeration division, a post he has held since 1936, and as general manager of the company's gas water heater division, established last year.

Starting with Servel in 1934 as manager of commercial refrigeration, Mr. Newcomb has been active in the manufacture and distribution of commercial refrigerating machines used in meat markets, stores, and similar establishments. The new vice president also has charge of electric air conditioning work at Servel. Both of these divisions now manufacture almost exclusively war products, such as refrigeration equipment for the army, navy, air forces, and war

(Concluded on Page 13, Column 5)

Army Ups Frozen Food Buying; WPB Begins Survey of Facilities

SCHENECTADY, N. Y.—A call for approximately 50,000,000 pounds of frozen vegetables from the 1943 crop has been made to the frozen foods industry by the U. S. Army's Quartermaster Corps, the food to be used for consumption by soldiers, it was explained here Oct. 2 by Col. Hubert W. Beyette, commanding officer of the Schenectady Quartermaster Depot.

Triple ends of the new frozen foods program pointed out by Col. Beyette will be to feed American service men stationed in the continental United States, to release a large supply of canned foods to fill overseas demands, and to save steel and tin for direct war uses.

"Such diversion will save about 115,000 pounds of tin and 10,000,000 pounds of new steel," Col. Beyette declared in a recent General Electric Farm Forum address.

"The steel alone," he added, "is enough to build several hundred medium-sized tanks."

Included in the Army's tentative frozen food requirements for next year, according to Col. Beyette, are 6,000,000 pounds of snap beans, 10,000,000 pounds of lima beans, 4,000,000 pounds of cut corn, 23,000,000 pounds of green peas, and 10,000,000 pounds of spinach. Purchase of small quantities of several other vegetables and three kinds of fruit in addition to these five primary items is also planned, said Col. Beyette.

Citing compactness and freedom (Concluded on Page 13, Column 4)

All Display Case Stocks In Dealer Hands Saleable

WPB's Ruling Dispels Doubt Over Sale of Double-Duty Models

WASHINGTON, D. C.—All of the common types of refrigerated display cases may be sold by distributors and dealers without restrictions, according to an interpretation made by the Office of the General Counsel of the WPB, thus clearing up a point in Amendment 4 to Limitation Order L-38 that was not clear to many members of the industry.

Declared the official WPB interpretation, made in answer to a request from AIR CONDITIONING & REFRIGERATION NEWS:

"This is in reply to your telegram inquiring as to whether paragraph (e) (3) of Amendment 4 to Limitation Order L-38 permits the sale without restriction of any refrigerated display case in the hands of a dealer.

"Paragraph (e) (3) of this amendment permits the sale and delivery of 'refrigerated display cases of all types' by dealers or other authorized channels of distribution (including bottlers of carbonated beverages and manufacturers of ice cream for resale) unrestricted by any other provision of this order. This includes 'single duty display cases,' 'double duty display cases,' and 'full vision display cases.'"

N.E.W.A. Fall Meeting Plans Are Cancelled

NEW YORK CITY—The National Electrical Wholesalers Assn. has cancelled plans for a fall convention, originally scheduled for October.

The executive committee of the association, however, will hold a two-day meeting Oct. 28 and 29 at the Hotel Pennsylvania in New York.

WASHINGTON, D. C.—The War Production Board has sent a questionnaire to frozen food packers asking details on individual plant facilities, operations, and products handled.

The information obtained from the questionnaire will be used to determine what facilities will be needed to assure full utilization of frozen food equipment during 1943.

The frozen food industry has shown rapid growth since pioneer work began in 1925. Now it is an important factor in food preservation. In 1941, approximately 202 million pounds of frozen fruits were packed, and 107 million pounds of vegetables, a total of 309 million pounds. The amount of meats, poultry, and fish frozen in 1941 is not now known, but it will be compiled from the questionnaire.

The armed forces have been consuming considerable quantities of frozen foods. They have been purchasing at the rate of 600,000 pounds of fruits and vegetables a month. The Army intends to purchase at least 53 million pounds of frozen fruits and vegetables if available in 1943. The plan calls for approximately six million pounds of snap beans, 10 million pounds of lima beans, four million pounds of sweet corn, 23 million pounds of peas, and 10 million pounds of spinach.

The form frozen food packers are asked to file is WPB-1582. Copies may be obtained at the Bureau of the Census, Washington, D. C.

What Dealers Are Doing About Merchandise Shortages

Northern California Group To Train Nearly 200 People In Service Trade Classes

SAN FRANCISCO—Approximately 120 women and 70 draft exempt men will be trained for appliance and home refrigerator repair work in a series of new educational classes being sponsored by the Northern California Electrical Bureau here.

The step was taken by the newly formed association in view of the drastic labor shortage which has kept many shops closed three and four days a week while scores of service calls piled up on a group of 33 appliance firms now in the service end of the business. With hundreds of veteran mechanics drafted into war service or leaving for defense jobs, it has been impossible to promise a refrigerator reconditioning job for less than three to six weeks ahead.

Cooperating appliance dealers will sponsor the new training program, which it is hoped will produce sufficient new personnel in six months to alleviate the situation. Classes in San Francisco will be held at the Samuel Gompers Trade School at 22nd and Bartlett Streets, while the

Oakland classes, equally large, will be held at Central Trade School at 2nd and East 11th. Other classes will be set up in surrounding cities.

Accent will be on women for the most part, according to the Bureau, which has carefully tested each applicant for the ability to withstand heavy work with precision repairs. Men partially crippled or physically exempt from military service will handle the heavier refrigeration loads while women will take up major appliance and small appliance repairs. Classes are to be taught by trade-school staffs and veteran appliance shop-mechanics.

Carolina Dealer Specializes In Rebuilding Work

GREENVILLE, N. C.—A new retail appliance dealership which is including a large service shop for reconditioning and reselling major appliances is Appliance Sales & Service Corp.

Cleveland League Girls Educating Users on Service

CLEVELAND—In a program which both aids the war effort and stimulates service business, eight young women on the staff of the Electrical League of Cleveland are advising local residents on the use and care of electrical appliances in order to keep them in good running order for the duration.

Members of this department of the league spend their workdays visiting Cleveland homes, advising the homemakers on any electrical problems they may have and informing them where they can get reliable service for their appliances.

Comprising four young women whose job formerly was to instruct new electric range owners in the proper use of their ranges and four others who formerly supervised the league's home lighting activities, the group has received intensive training enabling them to answer questions on the use and care of electric ranges, refrigerators, small appliances, dishwashers, garbage disposers and laundry equipment, as well as home lighting, wiring and air conditioning.

Headed by Mrs. Beatrice Combs, the department's personnel also includes Mrs. Helen Dornbirer, Dorothy Keppler, Betty Carpenter, Hortense Taylor, Mrs. Mildred Brugge, Mrs. Katherine Messenger, Mrs. Cora Harris and Mrs. Margaret Trible.

'Convert' To Service

15-Point Checkup For \$3.85 Is Offer of Promotion Minded Dealer

Herb Names, Famed For Merchandising Innovations, Goes the Whole Way In Turning To Service

DENVER.—A 15-point major appliance checkup service is being sold for \$3.85 to customers of Herb Names, Inc. here—as a practical means of increasing the average refrigeration service call from \$2.50 to \$3.85 to help pay the costs of operating with high-pay mechanics in a downtown location.

Herb Names, famed for many "innovations in appliance retailing," has led the way for a lot of western dealers in converting a \$125,000 yearly appliance business into a 100% service organization operating out of the store.

"Somebody has got to keep refrigerators, washing machines and other home appliances ticking," he said, "and now that a great many stores have closed up for one reason and another, we're finding the service load big enough to keep our store paying almost the same profits as it did a year ago. If we can manage to eliminate all dead weight, and make each service call pay a maximum profit, we think we can sail through the war in good shape and show an excellent profit besides."

MANPOWER AVAILABLE

Names deplores the attitude of appliance dealers afraid to go into service because parts are tough to acquire, and because good servicemen are scarce. "You can obtain good mechanics if you are willing to pay the price" he counters, "which means meeting the salaries paid by the government in defense plants or even going one better. A lot of competent service men going into munitions plants, etc., don't like the hours or the environment, and if you can show them as good an income in private industry, they'll flock in. I've got four men now being paid as well or better than is possible in government work, and I think I can get seven or eight as I need them."

Names' handsome store, located in the middle of downtown Denver, is gradually being changed from showroom to shop—service work to fill up the whole building if necessary. Right now the former warehouse and office section is a complete electrical shop. An 8 x 10 plate-glass chamber on the sales floor once used to show Bendix washers will be turned into a radio repair shop, where a uniformed man will make repairs in the public's view.

SERVICEMEN 'ON DISPLAY'

The large front window will become a service shop for small electric appliances, and a white-clad mechanic will work there all day in full view of sidewalk traffic outside. These two ideas will help to pay

the stiff downtown-district rent, and are exemplary of Names' aggressive ideas.

Four servicemen now on the payroll are all veterans. For their work, Names charges \$2.50 for the first hour, 85 cents per 20 minutes thereafter—applying the \$2.50 charge as a minimum for every call no matter how simple the correction is.

"We've got to make every call pay" he says, "so we tell every woman calling in that we charge \$2.50 whether we repair the box or just look at it, advising her that she must pay the charge. So far we haven't lost a good many calls, and there are no dead calls which represent a loss in time and expense to us."

THE 15-POINT CHECKUP

When the serviceman gets through with the repair job, he introduces a Names innovation—the 15-point checkup offer sold for \$3.85. On refrigerators this includes checking condenser, seal, door gasket, belt for glaze, fan, coils, hardware, expansion valve and all other parts, and making adjustments or even repairs immediately. Since it requires only a few extra moments and adds \$1.35 to the profit from the call, Names is merchandising this checkup heavily—more than half of his refrigerator customers accepting it to date. This, likewise, is suggested over the telephone when the customer calls in.

Names servicemen wear uniforms brightly lettered with the firm name, use canvas cloths to kneel on and protect floors while doing service work, and use a handsome decalomania to bring in further service work.

The shop itself is well equipped, with pressure cleaning apparatus, acid bath, welding and electrical equipment. There are no paint sprays, or ovens, however.

NO PAINTING

"We're painting nothing at all," Names explained. "In the war period, the accent is on serviceability, not looks, and consequently we're eliminating paint service. If the customer wants it we'll send her box to a paint shop, but there has been little demand for this."

One of the most valuable acquisitions to the shop is a large metal-working lathe, which Names bought in advance of the emergency. If he cannot buy essential parts, Herb Names, Inc. is prepared to make them from a stock of metals on hand. Two of his men are good metal fabricators and can turn out anything needed to repair washing machines and refrigerators.

"DAY & NIGHT" Announces: A NEW SERIES OF DRINKING WATER COOLERS FOR ARMY, NAVY, MARITIME AND WAR INDUSTRY SERVICE

This new series of Self-contained Drinking Water Coolers, available in November, includes a complete line of types and sizes complying with WPB Order Chapter I-L126.

NAVY SHIPBOARD MODELS

TYPE	SIZE NO.	FIXTURES	"DAY & NIGHT" MODEL NO.
A	5	1 Bubbler 1 Glass Filler	NUAPP5-2
A	10	2 Bubblers 1 Glass Filler	NUAPP10-3
A	20	2 Bubblers 1 Glass Filler	*NP20-3

DRINKING FOUNTAINS—FOR LAND USE

B	5	1 Bubbler	UAPP5-1
B	10	1 Bubbler	UAPP10-1

BOTTLE WATER COOLERS

C	2	1 Push Faucet	UAB2-1
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CAFETERIA GLASS FILLER COOLERS

D	10	2 Glass Fillers	*R10-2
D	25	2 Glass Fillers	*R25-2

*Condensing Units installed in field. All other models sold complete.



Model NUAPP5-2

SOLD THROUGH THE ESTABLISHED REFRIGERATION TRADE

COOLER DIVISION
DAY AND NIGHT MANUFACTURING CO.
FACTORY AND GENERAL OFFICES • MONROVIA, CALIFORNIA

PENN
CONTROLS

REFRIGERATION, AIR CONDITIONING, ENGINE,

HEATING, PUMPING AND AIR COMPRESSOR

**THE SHOT
YOU FIRED**

Let your trigger finger tingle, and a feeling of pride swell your chest when the headline stories of the feats of the Navy's new Corsair come back from the far-flung battle fronts.

Every burst of this mighty warrior's blazing guns that sends another Jap or Nazi tumbling into oblivion . . . will be a shot you helped fire.

For it's the sacrifice of Kelvinator dealers—like yourself—that will enable us to build, *in quantity*, the 2000 H.P. Pratt & Whitney high-altitude engines that give the Corsair its deadly striking power. The power to outclimb and outfight any known enemy in the sky. This mighty supercharged engine is the refrigerator you can't sell . . . made by the skilled hands of the same men who made the Nash-Kelvinator products of peacetime.

We know you want it this way—and we want you to know that your

sacrifices . . . these "shots you fire" . . . are speeding the day of Victory.

In the coming peace, the name of Kelvinator will bear a new and deeper significance to the American family . . . and the retailer franchised under Kelvinator's Selective Dealer Policy will find the doors to an even greater profit opportunity flung wide.

Already powerful forces are at work to assure this. New marketing and merchandising plans—a consistent advertising program to focus public attention on the corporation's new importance and growing prestige—both are material evidence of our determination that Kelvinator retailers, and we as a company, will be stronger than ever after this period of stress.

Farsighted retailers everywhere will do well to "Look Ahead with Kelvinator" in making their plans for the future.

GET IN THE SCRAP—BUY WAR BONDS AND STAMPS

KELVINATOR
DIVISION OF NASH-KELVINATOR CORPORATION



PRATT & WHITNEY
HIGH-ALTITUDE
ENGINES



NAVY'S GIANT
VOUGHT-SIKORSKY
FLYING BOATS



HAMILTON
STANDARD
PROPELLERS

Priorities Information

WPB Branches Assign Ratings In Emergency

WASHINGTON, D. C.—To prevent stoppage or slowdowns in essential production that might rise from lack of small amounts of critical materials, the War Production Board announced the authorization of regional offices to assign high preference ratings for the use of earmarked materials in emergency situations.

Under this regional emergency materials plan, preference ratings up to AAA to avoid positive losses of essential production, and up to AA-2X for other emergency cases may be assigned.

The quantities of materials against which such preference ratings in the aggregate may be assigned each month are not to exceed a small specified percentage of the available supply of each material.

The regional emergency allotment plan was put into operation Sept. 22 and during the first month only 10 of the 23 specified materials may be authorized.

These are:

Aluminum, brass, copper (refined), lead, nickel, pig iron, steel (scrap), steel (assorted structural), steel (other except plate), zinc.

Other materials to be included later in the plan include:

Cadmium, ferrochrome, cobalt, molybdenum, tantalum ore, titanium ores, tin, tungsten, vanadium.

Order P-118, Providing Ratings For Dairy Plant Repairs, Is Extended

WASHINGTON, D. C.—Preference Rating Order P-118, which assigns preference ratings to processors of dairy products for their maintenance, repair, operating, and replacement materials, is extended for 90 days to Dec. 31, 1942, by Amendment No. 3 to the order. The order was to expire on Sept. 30.

Order P-118 assigns an A-1-j rating for maintenance and repair needs and A-3 for operating and replacement needs of dairy processors.

DEFINITION OF PROCESSOR

"Processor," as defined in Order P-118, means any person located in the United States, its territories or possessions, engaged in one or more of the following capacities to the extent that he is so engaged:

(1) Pasteurizing milk.

(2) Receiving milk from other persons for cooling preparatory to receipt for further processing.

(3) Producing dairy products, for sale, by processing milk or cream in a plant not located on the farm where the milk was produced;

or any person, located in the Dominion of Canada, to whom and in whose name a copy of this order is specifically issued.

Nickel Now Restricted To War Uses Only

WASHINGTON, D. C.—Use of nickel, except where specifically authorized by the Director General for Operations, was restricted by the WPB on Oct. 3 to implements of war and other products certified by the Army-Navy Munitions Board to be essential in the successful prosecution of the war. This tightening of control over nickel is contained in a Conservation Order M-6-b revision.

Previously, the order prohibited the use of nickel in a long list of products, and permitted the use of nickel in all other products only on specific allocations by WPB. This provision is retained in the revised order. However, the general exemption from these restrictions in favor of the armed service, A-1-k or better orders, and where necessary for compliance with safety regulations, is removed.

Implements of war are defined as combat-end products, complete for tactical operations. The phrase includes aircraft, ammunition, armament, ships, tanks, and other military vehicles, and parts to be incorporated in such implements. The term does not include facilities or equipment to be used in the manufacture of such items.

The amended order also contains a re-phrased provision relating to the use of nickel, under permission by the Director General for Operations, for products not appearing on the prohibited list. No substantial change in control is involved here, the section being rewritten for clarity.

Firm That Used P-100 Rating For New Pieces Penalized by WPB

NEW YORK CITY.—The illegal practice of using maintenance and repair priority ratings under Order P-100 to obtain steel wire for general production has been charged to the Reliable Tool and Wire Products Corp. and its president, Louis Rubin, by the War Production Board under suspension order S-102, effective Sept. 21.

This order prohibits the corporation from purchasing, putting into process, selling, or otherwise disposing of any steel wire, except as specifically authorized by the director of general operations, WPB. In addition, the company is denied the benefit of preference ratings for the term of the suspension order, which expires Nov. 21, 1942.

CHANGES IN ORDER

The suspension order states that from April 1, 1942 through June of this year, the company, which is engaged in the manufacture and sale of steel hooks used in the making of children's dolls, applied for and obtained approximately 11,540 pounds of bright steel wire.

The WPB charged that Mr. Rubin applied on an A-10 priority rating under the P-100 maintenance and repair order. The materials thus obtained were used to fabricate more doll parts.

Moreover, according to the suspension order, it was charged that Mr. Rubin in extending his preference rating to his supplier, had relied upon advice given by persons outside the WPB, which he had reason to believe were erroneous.

REDUCED SUPPLY

WPB officials pointed out that misuse of P-100 maintenance and repair preference ratings not only worked hardships on legitimate applicants for similar supplies, but also reduced the amount of "critical and scarce" materials available for military and essential civilian goods.

Thus, the 11,540 pounds of steel obtained by the Reliable Tool and Wire Corp. to manufacture tool parts, might have been used to turn out approximately 11 two-ton aerial bombs or 300 Garand rifles or five

speedy Army jeeps, one official explained.

The unused portion of the Reliable inventory on steel wire has been automatically frozen by the suspension order and will be disposed of either through a voluntary sale by Reliable or requisitioning by WPB.

Gov't to Control All New Gas Cylinders

WASHINGTON, D. C.—Control over production and distribution of gas cylinders was ordered by the War Production Board with issuance of General Preference Order M-233.

The order provides that between now and Jan. 1, 1943, production and delivery of the cylinders and cylinder forgings will be subject to such directions as may be issued by the Director General for Operations.

After Jan. 1, production and delivery of the cylinders will be permitted only as specifically directed by WPB. If necessary, in granting authorization, WPB will ignore ratings assigned to particular contracts or purchase orders in order to meet the requirements of the war program.

Producers are also required to submit on the 25th of each month, beginning Oct. 25, production and delivery schedules for the third following calendar month, on Form PD-622.

Gas cylinders are steel containers or steel drums used primarily for shipment of various types of gases charged at high or low pressure.

Junior Engineers Are Sought by Air Corps

DAYTON, Ohio.—A second appeal for junior engineers in the mechanical, electrical, and aeronautical fields has just been issued by the U. S. Army Air Corps at Wright field here.

Openings are available for immediate appointment at \$2,400 per year. Graduate engineers with no experience as well as those physically handicapped may qualify.

Further information may be obtained by contacting Recruiting Section, Seventh U. S. Civil Service Region, Room 1107, New Post Office building, Chicago, Ill.

Very Seldom do they need service but.. dependable valves should be checked now

Although your A-P valves give you years of trouble-free service, they shouldn't be taken too much for granted . . .

Most of them will not need service attention . . . but a few might . . . and a small replacement is a lot easier to fill than to run the risk of a system breakdown.

Nearly all the material in these dependable A-P valves is on the critical list . . . so let's conserve metal by proper maintenance.

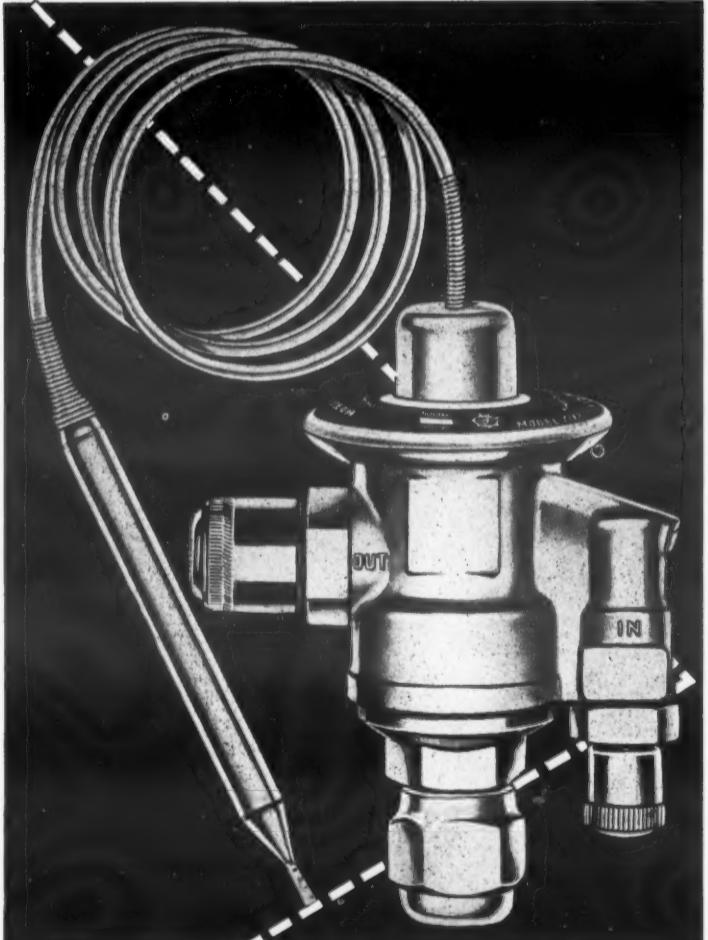
Check your A-P valve installations periodically to help your customers most.

Illustrated:

A-P Thermostatic Expansion Valve Model 207



AUTOMATIC PRODUCTS COMPANY
2450 NORTH THIRTY - SECOND STREET
MILWAUKEE, WISCONSIN
Export Department
100 Varick Street . . New York City



DEPENDABLE
Refrigerant Valves

★ **THROW YOUR SCRAP INTO THE FIGHT!** ★

NEW INSULATOR IS BETTER THAN PHYSICISTS THOUGHT THEORETICALLY POSSIBLE

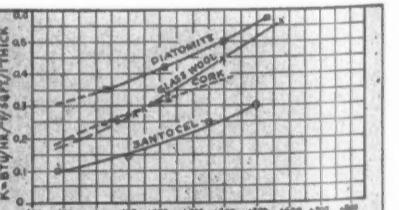
SANTOCEL Answers Low-Temperature Insulation Problems . . . Promises to Cut Insulation Space in Household Refrigerators 40%

HERE is the answer to many of the problems of low-temperature refrigeration . . . and the promise of 40% more useful capacity in household refrigerators with no increase in over-all size and no loss of thermal efficiency. It is SANTOCEL, a silica aerogel which is, in effect, a new form of matter.

Several years of exhaustive laboratory and actual use tests have proved that this new material is more efficient than any heat insulating material known. In fact, careful and accurate measurements have shown beyond any possible doubt that the thermal conductivity of Santocel is about 15% lower than that of "still air", the best physicists previously believed possible.

Thanks to this greatly increased insulating efficiency — 1.7 times that of glass wool or cork and more than twice that of diatomaceous earth — Santocel holds great promise for low temperature units such as those used for special test equipment and for the storage or transportation of liquefied gases and frozen foods.

As for household refrigerators, its use in a conventional home unit should result in such significant reductions in the insulating space that it will be possible to build a refrigerator of 9 cu. ft. capacity with outside dimensions no larger



These curves show K factor plotted against mean temperature for diatomite, glass wool, cork and Santocel. Data was taken from the International Critical Tables. Since points given were not sufficient to cover a wide range of mean temperature, curves have been extrapolated (in dotted lines) to cover the same range as Santocel.

than a present-day 6.4 cu. ft. box and with no loss whatever in thermal efficiency.

Unlike conventional silica gel, Santocel does not pick up significant amounts of water vapor from the air. Also, diffusion of moisture-laden air, a common source of insulation difficulties in low-temperature insulation, is non-existent in Santocel. As practical proof, Santocel-insulated cabinets have been tested under very adverse humidity and temperature conditions over a two-year period and condensation has not been measurable.

Finally, Santocel is inert, and will last indefinitely. Properly installed, very little settling will occur. For full technical details and samples, inquire: MONSANTO CHEMICAL COMPANY, Merrimac Division, Everett Station, Boston, Mass.

MONSANTO
CHEMICALS

SERVING INDUSTRY . . WHICH SERVES MANKIND

Kansas City Men to Work 3 Days a Week Only 'on the Outside'

KANSAS CITY, Mo.—Several leading refrigeration service organizations here have set up plans whereby servicemen work "on the outside" only three days a week, spending the remaining three days inside doing shop work which otherwise would pile up to staggering proportions.

The system was adopted when it was found that none of the firms involved could handle all service calls received even working 24 hours a day, and consequently, reconditioning and rebuilding work flowing into the shop was being neglected—even when one or two men were detailed to exclusive shop work. Many shops which have formerly given 24-hour service on commercial refrigeration are now from two weeks to a month behind.

Under the three-days-a-week plan, advantages are many. Appointments for a specific time are made and kept, the shop work is kept rolling out, and tire rubber and gasoline are saved. More important, the three-day plan enables the service organization to limit the number of calls it will accept—actually turning down business which otherwise causes tie-ups and wasted time.

New Service to Collect Grease From Exhaust Ducts For War Use

CINCINNATI—An exclusive service to collect exhaust fats for the national salvage campaign has been originated by the Chemical Service Corp. here.

Waste fats collected by the company will be converted into glycerine which is used for cannon shot for this war, and the service is also guaranteed to fireproof and grease-proof ducts in hotels and restaurant kitchens.

The grease accumulated in ducts and exhaust fans is not only hazardous, but reduces their efficiency. It is estimated that the average restaurant exhaust system yields anywhere from 25 to 300 pounds of grease, depending on how often it is cleaned. Arrangements have been made with renderers to accept such grease to be salvaged for the war.

The corporation guarantees their treatment of cleaning and fireproofing grease ducts for one year without interruption to business. This service seals all leaks, prevents grease dripping back into the food, as well as fireproofing and grease-proofing any exhaust system.

This may avoid fires and water damage which might mean new equipment and expensive repairs.

WPB Capital Offices Open Sat. Afternoons

WASHINGTON, D. C.—The War Production Board has gone on a full 6-day week for the duration.

The regular office hours of WPB, both in Washington and in the field, now are from 8:30 a.m. to 5:15 p.m. daily except Sunday. However, under the terms of the Administrative order setting up the new system, employees who work on Saturday afternoons are, in accordance with law, granted compensatory leave of four hours to be taken sometime during the next week.

Purpose of the order is to insure that all offices and units of WPB function six days a week, without a let-down on Saturday afternoons.

Kelvinator Makes Change In Kansas City Setup

KANSAS CITY, Mo.—Nash-Kelvinator here has moved its refrigerator distribution offices from 2601 Walnut St. to a new office at 2630 McGee Traffic-Way for the duration. Parts and service departments were included, while actual service work is contracted out to Jones Refrigeration Service, an independent organization. R. L. Houghton, formerly parts manager at Kansas City, has been transferred to St. Louis.

New Edition of Govt. Manual Is Completed

WASHINGTON, D. C.—The fall edition of the United States Government Manual, a 700-page reference book on the creation and organization functions and activities of the Federal Departments and Agencies, is now off the press.

The new edition, which contains changes through Sept. 1, includes statements on all the branches of government, a list of principal officials, separate sections on the emergency war agencies, organization charts, publications and commonly used abbreviations.

It also contains an appendix on agencies abolished, transferred or consolidated since 1933.

The Manual may be purchased from the Superintendent of Documents, Government Printing Office, Washington, D. C., or at the U. S. Information Center, 1400 Pennsylvania Ave. N.W. Single copies cost \$1; subscriptions covering the three editions a year cost \$2.75.

Donald Davis Heads Coordination Program In New WPB Move

WASHINGTON, D. C.—Donald D. Davis, president of General Mills Co., Minneapolis, has been appointed director of the newly created Program Coordination Division of the War Production Board.

Mr. Davis is the first of several top men in the production field who will be recruited by WPB to strengthen the staff of the office of the Vice Chairman on Program Determination.

Duties of the new division include the development and recommendation to the Vice Chairman on Program Determination, of an over-all national production program, integrated and coordinated with over-all strategic requirements, to the end that the most effective use is made of national resources.

Mr. Davis will be responsible for all program recommendations by the Division.

League Official



RANDALL J. MILLER
Acting secretary of Electrical League of Cleveland.

Randall Miller Is Acting Secretary of Cleveland League

CLEVELAND—Randall J. Miller was named acting secretary of the Electrical League of Cleveland at a recent meeting of the League's board.

He succeeds William T. Clark who resigned in August.

Mr. Miller has been with the residential division of the Cleveland Electrical League for the past six years. His job was to work with dealers and distributors on promotional campaigns and displays.

A graduate of John Carroll University, he had 10 years experience in the retail electrical appliance field.

Utility Man Joins Navy

MILWAUKEE, Wis.—Kenneth W. Browne, sales manager of the refrigeration department of the Milwaukee Gas Co., has been commissioned a lieutenant, junior grade, in the naval reserve.

ELIMINATE THE "BLIND SPOTS" IN YOUR CASES WITH Thermopane

"NO FOG" GLASS TOP HELPS SELL FROZEN FOODS

REFRIGERATION EFFICIENCY KEPT AT HIGH LEVEL

RECESSED PROTECTED CORNERS

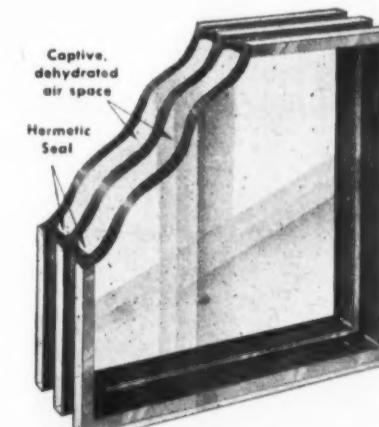
Replace Old-Fashioned Case Tops for Better Display, Better Selling

With today's keener competition among thrifty shoppers, frozen food and other display cases equipped with non-fogging Thermopane have an important advantage over "blind top" cases—the customer sees what she wants! At nominal cost, you can replace your present solid-topped cases with Thermopane.

Because of its patented construction, Thermopane does not fog up—always clearly shows the goods inside the cabinet. Dust and dirt are permanently sealed out. In addition, corners are recessed and protected from rough handling, and refrigeration is kept at high levels—both of which reduce service calls.

The captive air is hermetically-sealed in... is dry and stays dry, eliminating condensation.

Chances are we have Thermopane sizes in stock to fit your present cases. Complete information is available by writing Libbey-Owens-Ford Glass Company, 1386-A Nicholas Bldg., Toledo, Ohio.



Each Thermopane unit is an air-conditioned glass sandwich. It consists of two, three or more panes of clear glass, separated by $\frac{1}{4}$ inch or $\frac{1}{2}$ inch of dehydrated air, and sealed about the edges by an airtight, moistureproof metal seal.

LIBBEY·OWENS·FORD
Thermopane
"Better Seeing Means Better Selling"

Victory Program Aims To Unify Industry's Wartime Thinking

Unity of Action Needed For Conservation Measures

Editor's Note: The Oct. 5 "Bulletin Issue" of the NEWS carried a news report of the initial "Victory Program" meeting of the refrigeration and air conditioning industry, which was held in Los Angeles under the chairmanship of Clarence F. (Sandy) Pratt of the California Refrigerator Co.

In this issue is presented a full report of the meeting, as reported by James B. Smith, News staff member. It gives in detail the aims and purposes of the Victory Program.

John K. Knighton of Servel, Inc., national Director of the Victory Program, and A. B. Schellenberg, Alco Valve Co., St. Louis, and a member of the Program's 18-man Executive Committee were principal speakers at the Los Angeles meeting.

"The Victory Program was conceived in January of 1942," stated Mr. Knighton, "when, in a conference with the Office of Civilian Supply, it was suggested to Dr. Wm. R. Hainsworth, president of the A.S.R.E., that this industry could further its contribution to the war effort if it would coordinate its efforts to provide more efficient use and operation of its resources."

"Accordingly, a meeting at which the industry's 13 trade associations were represented was held in New York in March to work out a plan for an industry conservation program. A Victory Program plan was formulated. Posters setting forth the

details of the Victory Program were designed and printed for gratis distribution. Five thousand announcements offering these posters were prepared and sent out."

"They brought six replies!"

"So in June," Mr. Knighton continued, "another committee meeting was called to see what was wrong. Somehow, that committee selected me as Director of the Victory Program."

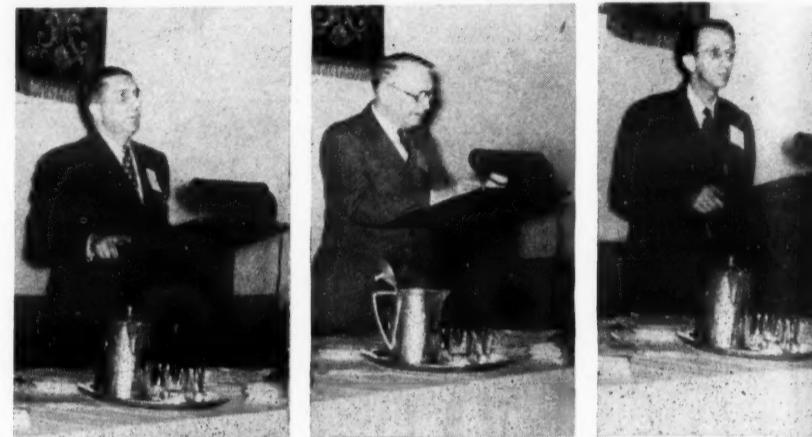
Mr. Knighton then recounted his own difficulties in setting up a permanent Victory Program Committee composed of individuals selected on the basis of industry efforts rather than trade or company affiliations, in bringing together the diverse elements of the industry for a unified program, and in getting the first Victory Program meeting organized. "Months have passed since this Victory Program Committee was formed. Months of delay have pre-

West Coast Responds To the Call For an Industry Victory Program



ceded this first meeting," he said, "because this industry is so chopped up, has so many segments each trying to be a non-cooperating entity. There is confusion. There is suspicion. Each different group is looking for a nigger in the woodpile. We've been in a tug of war in which everyone picked up the rope and went in a different direction, stepping on and gouging everyone else to obtain some personal petty advantage."

As indicative of the troubles already confronting the industry, and of others ahead unless a more whole-hearted spirit of unity, and of cooperation with the government is established, Mr. Knighton then read



(Above) A luncheon at the Biltmore hotel in Los Angeles preceded the West Coast "Victory Program" meeting of the refrigeration and air conditioning industry. Representatives of more than 100 coast firms pledged their support to the program. (Below) John K. Knighton, Director of the Victory Program; Clarence F. (Sandy) Pratt, chairman of the Coast meeting; and A. B. Schellenberg, one of the principal speakers, as they appeared while addressing the group.

the text of a lengthy letter from Sterling Smith, head of the Refrigeration Section of the WPB.

Mr. Smith's letter, written in lieu of personal attendance at the Los Angeles meeting by a WPB official from Washington, outlined the operation of the branch and of the Refrigeration Section, revealed the forthcoming rewriting and tightening of orders P-126 and L-38, and carried the grim warning that "heads will fall" unless the industry gets behind and complies more fully with government orders affecting this field.

Other government agencies, in addition to the WPB, are eager to see the Victory Program in operation, Mr. Knighton stated, describing his experiences in discussing the plan with officials at Washington.

"We saw Julius Rosenwald," he said, "and he spent a whole afternoon telling us the importance of voluntary industry cooperation and conservation to our present form of government."

"We saw James S. Knowlson, and he gave us his blessing and told us to get going quick."

McNUTT ON THE INDUSTRY

"We saw Paul McNutt, and he sympathized with our dangerous loss of manpower to other fields offering higher wages—but he told us that under the present classification of essential industries we can't have a manpower problem, because we haven't any manpower! He pledged his help in getting this industry onto the essential-industry list, and said it was a mistake we weren't on originally. That mistake is a result of our being a too-divided, disunited industry."

"This is an essential industry," Mr. Knighton continued, "because food preservation is essential—here, in our armed forces, and overseas, and because refrigeration and air conditioning have become indispensable to war production. But we must still, as an industry, establish that fact and take the responsibilities of conducting ourselves accordingly."

"The Victory Program is a program of accomplishment and enlightenment, designed to acquaint the industry and the government with the problems facing us all. More than that, it is a program of conservation—conservation of our manufacturing facilities, of our manpower, of our materials. Under it, we must assume the responsibility of using our knowledge of refrigeration and our abilities to help win this war."

"Our program is non-controversial within the industry. It is non-controversial between industry and

government. We are beyond the time for arguments now. We have a big job to do."

"Our purpose is to instill industry unity. Through that, we hope to accomplish the conservation of machines, materials, and manpower, and to establish a unity of action within the industry which will help it now and in the years ahead."

"This program is intended to point out your responsibilities in helping to accomplish these goals. The rest," Mr. Knighton concluded, "is up to you."

At this point, Mr. Schellenberg took over the meeting. Speaking on the essentiality of refrigeration and air conditioning to the war effort, he pointed out that the interpretation of the word "essentiality" by the American people would determine the outcome of this war.

"There is much in our American way of living that is absolutely essential to our war effort—and there is much that is not," he said. "The speed, skill, and sincerity with which our leaders and everyone of us approach the daily multitude of decisions as to what is essential to victory will determine our survival. If we are shortsighted and selfish in making these decisions, we are lost."

"Those things which are essential to the war, because they are so badly needed, must be made available in unheard-of quantities. This means that there can be no compromise."

(Continued on Page 7, Column 1)

No Joints! No Leaks



This Rome Jointless Water Cooled Condenser is a typical example of Rome's ability to provide trouble-free condensing equipment. Rome Water Cooled Condensers are used by many leading compressor manufacturers. Write for complete information.

ROME-TURNEY RADIATOR COMPANY

222 Canal Street
ROME, N. Y.

Machining
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ALCOA ALUMINUM

1942

It's NEW

HELP FOR THE MAN
ON THE MACHINE

of badly needed war materiel.

Alcoa engineers continue to be available to assist you in solving new and unusual Aluminum fabricating problems. They'll also gladly counsel with you on your postwar thinking. For this help, and for copies of this new book, "Machining Alcoa Aluminum", write ALUMINUM COMPANY OF AMERICA, 1975 Gulf Building, Pittsburgh, Pa.

Tools for various machining operations, tool shapes, cutting speeds and feeds, cutting compounds, characteristics of the different Aluminum Alloys; all these things are discussed in this new book, "Machining Alcoa Aluminum."

Beginners and experienced machinists will find this book equally valuable. It may contain your key to faster, higher quality production

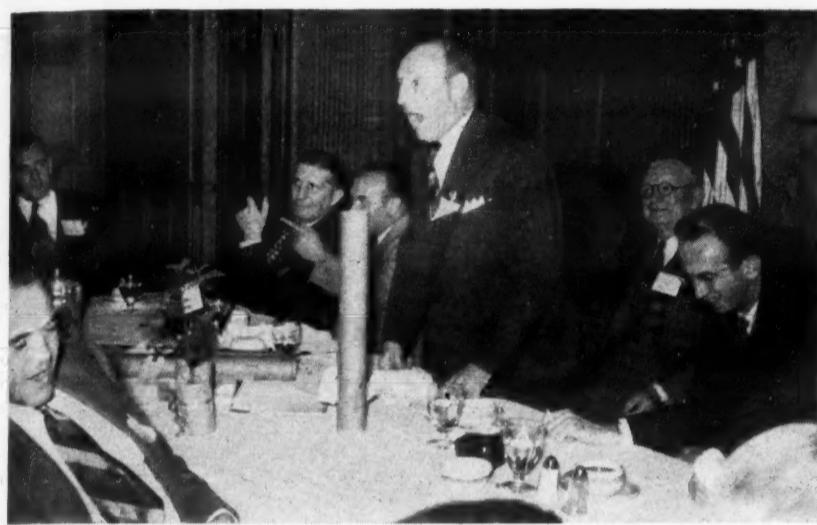


ALCOA ALUMINUM

The Meeting Provided a Big Coast Get-Together



"Doc" Armour, Arbell Refrigeration Supplies Co., Fresno; Frank Gillette, Cooler division of Day & Night Mfg. Co.; A. B. Schellenberg, president, Alco Valve Co. and a principal speaker at the meeting; and J. K. Knighton, director of the Victory Program, iron out some details of the Coast participation in the program at the conclusion of the Los Angeles meeting.



D. T. Ward of the Ward Refrigerator & Mfg. Co. leads the Coast group in community singing. The group at the speaker's table seem to be enjoying it without participating.

Victory Program Is Described as a Plan For Unified Thinking & Action by the Industry

(Continued from Page 6, Column 5)
with respect to the non-essentials. There is not capacity enough for all of the required essentials and the non-essentials too.

"This seems awfully fundamental and simple and yet, gentlemen, we are far from recognizing this simple truth," he continued. "In our role as Americans—we must approach our every action with the query 'Will this help or hinder our nation's war effort?' We must question each use of our industry's products—Can we afford to use this material and manpower for this purpose?"

Continuing, Mr. Schellenberg asserted that there are many of the industry's phases which are at best borderline cases for essentiality, but added, "There is much of the refrigeration and air conditioning industry which is vitally essential to our war effort. There are many refrigeration applications which are indispensable to our health and welfare. Refrigeration is today preserving and processing our food supplies—is speeding up production and saving

many valuable man hours, is preventing pestilence and epidemics."

Summarizing the role refrigeration industry is playing in the war effort, he spoke at length of the part the industry's products are playing in the preservation and transportation of civilian and military foodstuffs, in the operation of army and navy equipment, hospitals, photographic equipment, clothing storage, and in war production factories.

"The contribution of the products of our industry to the war effort is becoming so great," he stated, "that many of us are concerned about the manufacturing facilities available to meet this constantly increasing demand for refrigeration and air conditioning products. Almost daily some manufacturing company is being called upon to make more refrigeration equipment than it has ever made before. Yet the productive capacity of this industry has become sharply curtailed as one manufacturer after another has converted, partially or entirely, to other types of war production."

"These trends are indicated on this chart," explained Mr. Schellenberg, producing a graph showing that following drops in civilian business in the industry war demands pushed the sales curve up at a time when manufacturing facilities continued to decline rapidly.

"Everything possible should be done to secure and maintain manufacturing facilities adequate for war demands," continued Mr. Schellenberg, speaking of the need for conservation of the industry's resources.

THE TRAGIC POSSIBILITY

"It would be tragic if, as our nation's war needs for refrigeration unfold, it should develop that our industry's production, installation and servicing capacity is not sufficient because it has been so completely converted to other fields of war work, or is being wasted upon non-essential production."

"Refrigeration and air conditioning properly applied are truly essential to our war effort and because they are, our challenge and responsibility is great. I do not believe it an exaggeration to state that if half of the refrigeration equipment in operation in the Los Angeles area today

was to be shut down for two weeks, at the end of that time this area's war effort would also be reduced to one-half."

"Many of us," he continued, "feel that the men in Washington are not aware of the importance of refrigeration to war production and civilian life. I am sure the men on Bataan felt that we did not appreciate the importance of the gallant battle they were fighting. Yet they did an heroic job of patching up battered and bullet riddled planes with odd parts, wire and bamboo to fly again. They used all of the ingenuity and resourcefulness possible to hold out long after it seemed humanly possible.

TO 'KEEP 'EM RUNNING'

"We, too, must use what we have to survive as an industry and in so doing contribute to our nation's survival. Our first job is to keep this nation's refrigeration equipment running with a minimum expenditure of materials and manpower. We must hold to a minimum our demands upon the limited manufacturing facilities of our industry so that they can supply war refrigeration needs quickly and in quantity. An honest adherence to a real program of manpower and materials conservation by every last man in this industry is as important as any of the many phases of our war effort."

Mr. Schellenberg concluded his talk with a vivid description of the opportunities for the industry in the post-war world, but warned that such opportunities can exist only if the industry takes on itself its full share of the responsibilities of helping this nation survive the present crisis.

Following the conclusion of Mr.

Schellenberg's talk, Mr. Knighton again took over the meeting and proceeded to outline the actual operation of the Victory Program.

"Conservation," he began, "is the keynote of this Program. SAVE—SIMPLIFY—SUBSTITUTE are the methods by which it shall be accomplished.

"To be conservative is not a natural trait of the American people, and therein lies our trouble. We are willing to be—but we haven't formed the habit. We give lip service to the idea—but we may think our individual contribution is too small to be of importance. Or we may have a lazy streak and say 'Let the other fellow do it.'

BE CONSERVATIVE

"Whatever may be the alibis, they are out from now on. We must be conservative in the use of all things.

"Specifically, as an industry," he continued, "we must be ultra conservative in the use of materials, manpower and manufacturing facilities. More broadly, as citizens, we must be conservative in the use of food, clothing and transportation.

"So you see, conservation becomes a pretty darn good national habit right now.

"How are we going to develop the will to do these things?

"By enthusiasm, inspiration, patriotic fervor, and the application of sound engineering skill. By these methods we can do this job!"

With large wall charts Mr. Knighton then enumerated methods by which the industry could conserve its materials, manpower and manufacturing facilities through strict adherence to a series of conservation creeds covering:

1. Product Design.
2. Production.
3. Application Engineering.
4. Installation.
5. Service.
6. Maintenance.

As a means of recognition of any person, department or company whose contribution materially contributes to the success of the Victory Program through observance of these creeds, a special Merit Award Certificate has been prepared. Decisions as to those entitled to receive the Award will rest in the hands of a special committee composed of the Managing Editors of the industry's trade publications sponsoring the Victory Program.

AWARD PROSPECTS

In speaking of those who might receive the Award, Mr. Knighton said, "It may be a serviceman. It may be an installation man. It may be an application engineer, or a design engineer, a man on a lathe or a metallurgist, a superintendent or a janitor. It may be a department or a company.

"Recognition and publicity for those who wholeheartedly accept the spirit and the letter of these Conservation Creeds will help encourage others to adopt them. It will help to keep this great Program alive."

"Now, gentlemen," Mr. Knighton concluded, "you have heard the Victory Program. You know what it is. You know what you are to do.

"This Program is a physical manifestation of the desire and ability of this industry to help win the war. WE are the industry—every single one of us—working together for a common cause—to help win the war.

(Concluded on Page 9, Column 1)

YOUR SERVICE IS IMPORTANT ON THE "HOME FRONT"

Service men, your job is important on the home war front. Your obligation to the war effort is to keep Refrigeration Equipment in efficient operation to preserve food which is a vital necessity for war workers.

So don't quit your job. Instead, take care of your customers.

Help them by providing the necessary services and repairs to their refrigeration equipment. They in turn will be able to take care of the war workers. And later, when it is all over, they will take care of you. Brunner Manufacturing Company, Utica, New York, U. S. A.

NEW BRUNNER REFRIGERATION SERVICE MANUAL

The new Brunner Refrigeration Service Manual, the most authoritative book of its kind, tells and shows you how to locate refrigeration equipment trouble and how to correct it.

The price is \$2.50. One hour of time saved in locating trouble pays for the initial cost. Get your copy, today, while the supply lasts.

Remember, it's more patriotic to make a repair than sell a replacement because you save material for munitions.



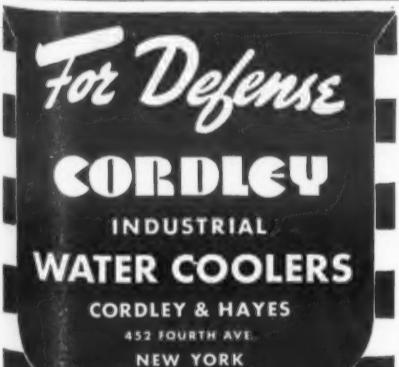
Brunner Manufacturing Co., Utica, N. Y., U. S. A.

Enclosed is \$_____. Please send me _____ copies of the new Refrigeration Service Manual.

Name _____

Address _____

City and State _____



Air Conditioning & REFRIGERATION NEWS

Trade Mark registered U. S. Patent Office; Established 1926 and registered as Electric Refrigeration News

F. M. COCKRELL, Founder

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Refrigeration Will Help Win the War

Treasury Ruling Is Gratifying

CONSIDERABLE gratification is being expressed by executives throughout the industry over the recent explicit ruling of the United States Treasury Department that "reasonable and normal" expenditures for advertising are tax-deductible, even though made by firms which are manufacturing principally for government.

The War Production Board goes even further, in a statement issued over Donald Nelson's signature, by stating that such advertising expenditures are legitimate items of cost in figuring government contracts.

RECOGNIZES RIGHT TO MAINTAIN GOOD WILL

Guy T. Helvering, Commissioner of Internal Revenue, issued the Treasury statement. This statement recognizes formally the right of war contractors to maintain through advertising their trade names and good will, and to make reasonable advertising investments in future public patronage as well as in contributions to the war effort.

This will relieve the minds of a good many corporate comptrollers and attorneys, who have feared that if a concern were largely "converted" to war production—and the U. S. government its only customer—advertising to the trade and the public might not be considered tax deductible.

Most corporations, of course, have continued some advertising, even though they were uncertain as to the tax situation, on the premise that even if the advertising appropriation had to be taken out of reserves, it was necessary as business insurance.

The fairness of the Treasury ruling

will be lauded by all. When a company sacrifices its normal markets, breaking by necessity priceless trade relationships, in order to produce something entirely new and different—the market for which will cease entirely with the war's end—it surely deserves to maintain through advertising continuous contact with its former distribution and consumption channels.

In the past every manufacturer has had an active selling force out in the field, making regular and frequent personal contacts with the field. These forces have now, for the most part, been disbanded. Advertising thus becomes the sole remaining link between manufacturer and distributor.

PROBLEM OF REBUILDING DISTRIBUTION WILL BE HARD

It will be difficult enough to rebuild a distribution system from scratch after the war. Without the advantage of continuing contacts-in-print with the surviving distributor-dealer-jobber-service man group during the war period, a manufacturer would be almost in the position of never having been in the refrigeration business at all when he started out to regain his position in the industry at the war's end.

The same holds true, of course, for makers of parts and supplies sold to complete-unit manufacturers.

Selling advertising in a publication such as AIR CONDITIONING & REFRIGERATION NEWS during the last year has been awkward and difficult at best—despite the fact that subscriber interest is demonstrably at an all-time peak, and the fact that readers now must depend on the NEWS more than ever before for regular information on how they can conduct their businesses.

RULE OF COMMON SENSE APPLIES TODAY

Always before it has been possible to demonstrate the dollars-and-cents value of advertising in the NEWS. Today the values we have to offer are intangible. The advertiser now uses the rule of common sense, instead of dollars-and-cents.

Now that the Treasury ruling clears up the major difficulty, the future seems brighter. The second biggest difficulty—what to say in the copy—we note is being solved successfully by many firms in the industry. Recent advertisements in the NEWS have made splendid reading, and their effectiveness is vouched for by numbers of our subscribers.

Because it sells for a \$4-per-year subscription price, the NEWS can offer in its subscription list a roster of the industry's firms which are still in business, which will stay in business, and which retain their interest in refrigeration and air conditioning. In themselves they offer a nucleus of a distributive system around which the industry can build.

The same holds true for manufacturers. A manufacturer may have closed up his refrigeration department entirely, yet if his firm still subscribes to AIR CONDITIONING & REFRIGERATION NEWS, it's obvious that the firm is keeping abreast of the industry so as to re-enter it at the war's end.

Inasmuch as the NEWS depends on advertising for the bulk of its revenue, we salute those far-sighted manufacturers who have continued their schedules in the NEWS during the uncertainties of 1942. We sincerely believe our subscribers are grateful, too, for their having made possible the continued service of the NEWS to its readers.

They'll Do It Every Time



eration service men are absolutely needed during these times because people will have to do minor repairs themselves. The point has already been reached however where the present force of service men are need for major and emergency service. We are already turning down service of a minor or adjustment nature because we can't begin to handle all the service that comes to us without any solicitation whatsoever.

If these men are not held at this work now they are gone for the duration with no way of replacing them. Food will spoil by the tons and sickness is bound to develop, if this problem isn't properly appraised now. Another 60 days will close most electric refrigeration service agencies unless some relief is secured.

Won't you give this your best attention at this time? If you agree that this service is of paramount importance won't you bring this to the attention of the man power board as well as the Selective Service Board?

Very truly yours,
LANDIS ELECTRIC CO.

(Identical letter sent to Col. B. F. Evans, Headquarters for Selective Service, P. O. Box 92, Harrisburg, Pa.).

LETTERS

LANDIS STRESSES NEED FOR ESSENTIAL RATING

Landis Electric Co.
121 N. Duke St.
Lancaster, Pa.

Editor:

We are enclosing copies of two letters which are no doubt self-explanatory.

Are you doing everything you can to help hold refrigeration service organizations together for the duration? If the selective service and man power boards don't take this seriously they may be held accountable for much sickness and food spoilage.

Won't you give this thing a boost? By a boost I mean a special edition on the importance of electric refrigeration service men being held in their present jobs or some such similar major move.

I read your publication regularly and know that you are already trying to stress it but it isn't enough. A special edition with copies sent to the proper places in Washington should shake something loose. If you would send us extra copies we would see that they would get to all local draft boards.

HARRY H. LANDIS, JR.

President.

U. S. Public Health Service
Office of Surgeon General
Washington, D. C.

Gentlemen:

We should like to ask you whether there is serious thought being given to keeping electric refrigeration service men on the job for the duration.

These service men which are as scarce as hen's teeth today are getting still more scarce. We have already lost three to defense jobs and haven't been able to replace a single one. We are about to lose another one to an enlistment into the Army because he can now select a service which he can't do if drafted.

All so-called independent refrigeration service men have gone into defense industries or have enlisted. This has thrown such a strain on the remaining servicing agencies that it is just impossible to handle the service.

The question of course arises as to whether these men perform a necessary service in these trying times. We feel that there can be no other answer to this than yes. They service over 8,000 electric refrigerators in Lancaster consisting of installations in hospitals, schools, industries, farms, commercial establishments, and homes. Our equipment in hospitals consists of food storage, water cooling and X-Ray developing baths. In schools again it is food storage and water cooling. In industry it is water cooling in the main with some product cooling also. On farms it is food storage entirely with the accent on milk cooling. In commercial establishments it is food with accent on meats and milk. In homes it is food storage as well as serum for doctors.

To train a service man for this work requires at least three years. Most of our men have been doing this work for over 10 years and some of them for 20 years. It is one of the most highly skilled trades. It is just about impossible to try to start training new men for this work. There aren't any men around now who will go through such training and manufacturers have closed all training schools for the duration.

These men are really sacrificing to stay at this work inasmuch as all of them can go into defense industry locally at much higher wages than we can pay them due to an OPA price ruling. They will stay only because of loyalty to a job.

We understand that not all electric refrig-

DOUBLE-DUTY CASES IN HANDS OF DISTRIBUTORS AND DEALERS MAY BE SOLD, WPB RULES

Lee-Shell Co.
1141 W. Madison St.
Chicago, Ill.

Editor:

We have received your latest issue of REFRIGERATION NEWS and as usual read it very carefully, particularly about your front page article dealing with Amendment No. 4 to General Limitation Order L-38. In this article you definitely state that all refrigerated display cases now in the hands of dealers could be disposed of without any priority rating.

Upon reading the actual order itself have found that only top display refrigerated counters are mentioned and nothing at all said about double duty cases.

This being a bit of important information to the writer I personally called on the War Production Board office in this city to ascertain who was right and brought the REFRIGERATION NEWS with me and it was their decision that you have probably made an error.

We can all make mistakes and this one might have caused us to sell new double duty counters without hesitation. Since we checked with the Board we felt it was our duty to inform you so that you can verify your source and find out whether you should have made the statement that you did or should have qualified that statement to read single duty display cases only.

Please do not get the impression from this letter that we are finding fault with you, as frankly there is a lot of credit due you for the good job you have been doing for the industry. We watch your paper with great interest for "what's new in the industry" and have gained a lot of timely information that has been of great help to us.

We are assuming for the good of the trade that you will make this correction in your next issue so that it will not be misleading, but if your statement is absolutely correct we would appreciate knowing about it by return mail.

I. W. SHELL

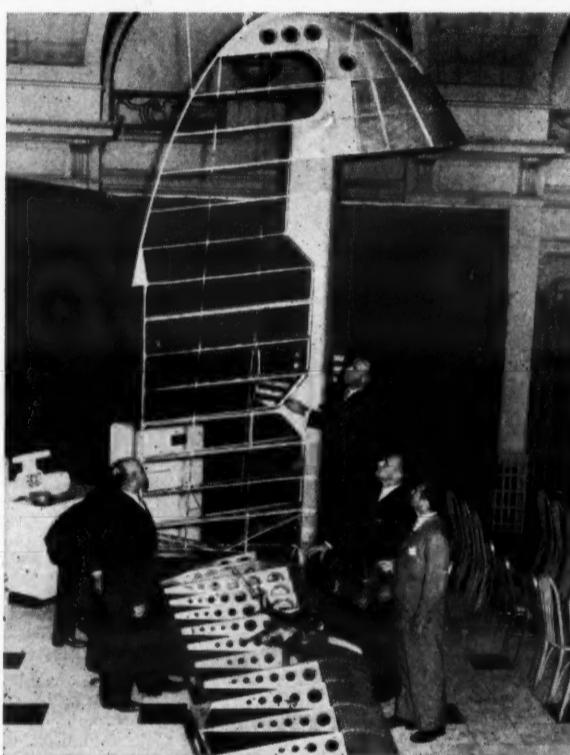
Answer: We appreciate your calling to our attention what seemed like an error, but as you will note from the official word received from the WPB General Counsel's office, as reported on page 1 of this issue, our interpretation was correct. Double-duty display cases can be sold without restriction.

Kelvinator Men See War Products



Kelvinator distributors from all over the country gathered in Detroit recently to get first-hand knowledge of the firm's gigantic war production program, and to discuss future plans, particularly in respect to the maintenance and strengthening of the dealer organization for the time when domestic business is resumed. Frank R. Pierce, vice president in charge of sales of Nash-Kelvinator Corp., is shown here, at a banquet given for the distributing organization, with R. W. Walsh (left), Kelvinator zone manager in Detroit, and Morris Sanditen (right), president of Otasco, Leonard distributor in Tulsa.

Center of attention at Kelvinator meeting was the portion of tail and rudder assembly of the mammoth flying cargo boat Nash-Kelvinator will turn out for the Navy in its New Orleans plant. Inspecting the assembly are H. A. Thompson of G. S. Blodgett Co., Kelvinator distributor in Burlington, Vt.; Charles T. Lawson, manager of New Orleans plant; E. R. Legg, household sales manager of Kelvinator, and Max Krich, president of Krich-Radisco, Kelvinator distributor in Newark.



Pacific Coast Representatives Pledge

Support to Victory Program

(Concluded from Page 7, Column 5)

"As an industry and as individuals, we propose to contribute to the fullest. We know something of the capabilities of this industry. We know something of our shortcomings. Knowing these things, we can put this knowledge to work to the end that our resources are utilized for the greatest good."

"If we can achieve unity—if we can have a full fledged Conservation program in effect throughout the industry—then we will have proven that this industry can administer its own affairs in keeping with the regulations of a democracy at war."

"Then we will have earned the right to serve as counsel with government in determining the essential wartime uses, plans and programs for the proper utilization of this industry."

"This Victory Program is a stirring challenge to the good that is in us, a challenge to our abilities, a

challenge to the real value—the utility—of the products of this industry."

"It can be done—you know it and I know it—but it can only be done if all of us, not just a few, firmly resolve that it WILL be done. The success of our united efforts can come only through such determination."

"The proper keynote for our action may be self discipline, the motivating force may be patriotism, or pure unadulterated selfishness, but the net and final result must be one of complete accomplishment."

"Let's take this thing to heart. Don't be a skeptic. Don't think that your effort is not needed. This is a serious undertaking. War is a serious business. Whatever we can do to help win is darned important—to you, and to me."

Response to Mr. Knighton's eloquent plea was immediate. Speaking as a representative of

SURE

, AMERICA'S SEA-FIGHTERS LIKE BEANS, BUT....

★
THROW YOUR SCRAP
INTO THE FIGHT
★

Beans have long been a standby on military menus. America's sea-fighters eat their share and like 'em. BUT... they like other chow, too. What's more, they're getting it, plenty of it, thanks to dependable automatic refrigeration. For 22 years, dependable and economical automatic refrigeration has been Universal Cooler's one and only job. And today, at war-time tempo, thousands of refrigeration units are rolling off Universal Cooler's all-out war production lines for the United States Navy. These Units are "joining up" with other Universal Cooler Units serving with the Navy... as well as in the Army, Marine and Air Corps. ★ Universal Cooler is proud of this opportunity to supply all branches of the service with important war weapons, including lubricating pumps for giant bombers, water chests and pumps for cooling machine guns and hydraulic mechanisms for the fast, accurate aiming of heavy artillery.

UNIVERSAL COOLER



UNIVERSAL COOLER CORPORATION • Automatic Refrigeration since 1922

MARION, OHIO • BRANTFORD, ONTARIO

AIR CONDITIONING & REFRIGERATION NEWS, James B. Smith recounted the paper's efforts towards achieving industry unity of the type at which the Victory Program is aimed, and pledged the publication's support of the Victory Program drive.

R. O. White, manager of the Cooler division of the Day & Night Mfg. Co., Monrovia, Calif., pledged financial support of the program and expressed the intention of thoroughly explaining the plan to his production, design and engineering executives, who, he stated, would have been at the meeting had he known the scope and importance of the Victory Program plan.

"This meeting," said Mr. White, "has given me a better vision of this industry's wartime operations and responsibilities than my previous six trips to Washington. If any serviceman or jobber who wishes to have copies of the Victory Program posters for his store or shop will contact me, I will see that he obtains them."

Wardell Lomba and Henry B. White, of Triad Engineering Co., Oakland, not only pledged support of the program but within an hour

had mailed copies of the Victory Program books distributed at the meeting to 35 associates in the Oakland area with invitations to the forthcoming meeting at San Francisco, called at the suggestion of Charles Merrill, president of the Refrigeration Engineers Group of San Francisco.

Jess E. Rausch pledged financial support of the Program on behalf of the Air Conditioning Society of California and guaranteed a thorough discussion of conservation measures at the Society's next meeting.

H. L. Stowers of the H. L. Stowers Co., Pasadena, admitting that he had not been aware of the seriousness of the situation, offered to pass along to users of equipment in this area the fundamentals of maintenance conservation and made a plea for each man at the meeting to take home ideas offered at the meeting to others in his own territory.

J. C. Blair, an old-timer in the refrigeration field and at present educational director of the R.S.E.S., A.S.R.E., and N.A.P.R.E. under the Board of Education labor-management committee of the Los Angeles

area, assured those at the meeting conservation would become a theme for continuing discussions at the weekly classes he conducts for local service training. Copies of the conservation creeds will, he stated, be mimeographed and distributed at these classes.

H. G. Mansfield, representing the Union Ice Co., suggested that local A.S.R.E. groups take up the duties of acting as liaison agents in disseminating further information about the Victory Program to localities not represented at the Los Angeles meeting.

M. L. Stewart, manager of the Stewart Ice Machine Co., Los Angeles, and operator of a locker plant at Pomona, urged support of the Program and detailed means by which he had been able to produce enough parts from odds and ends not only to keep his plant at Pomona operating, but to insure the early opening of a second plant he is now occupying.

Many others in the group pledged full support of the plan as the meeting adjourned for an informal dinner session.

Artic
MFG U.S. PAT. OFF.
ELECTROCHEMICALS DEPARTMENT
E. DU PONT DE NEMOURS & CO. (INC.)
Wilmington, Delaware
OR National Ammonia Division
Frankford P. O. Philadelphia, Pa.

For information about nearest source of supply, write to

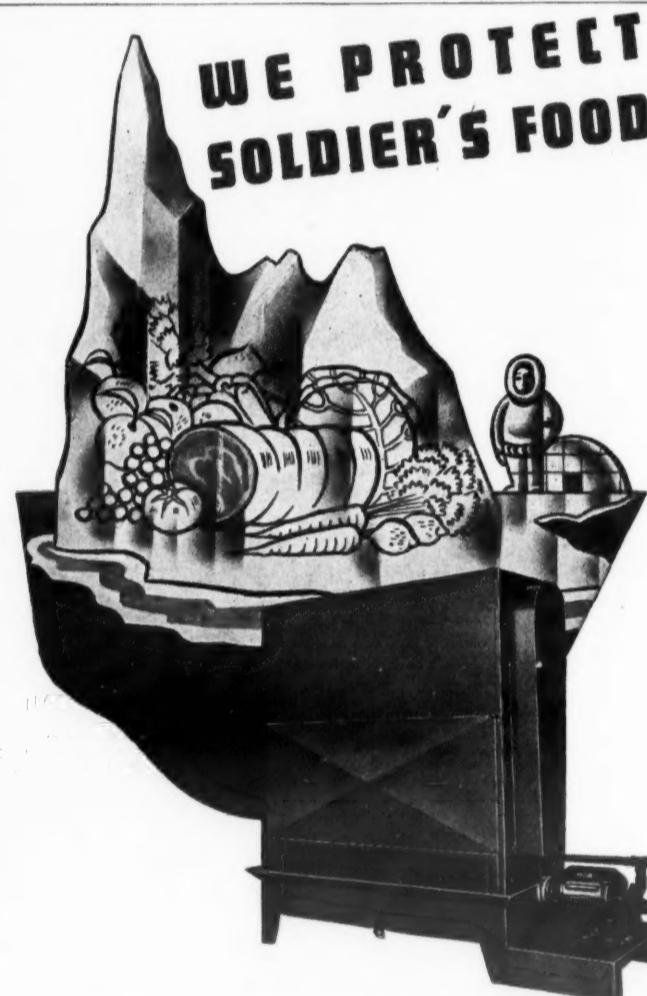
**TO ASSURE QUICKER DELIVERIES
RETURN EMPTY CYLINDERS PROMPTLY!**

There is a shortage of cylinders for refrigerants. If you will return your "Artic" Methyl Chloride containers as soon as empty, your deposits will be repaid immediately—and you will prevent delays in shipments of "Artic" to your shop! Round up any empties you have now and ship them back!



Editor's Note: The editorial material on this page is a published version of "Servicing Scotch Yoke Machines," originally presented as a sound slide film produced by the Product Service Division of General Electric's Appliance and Merchandise Department. The material is appearing in instalment form in Air Conditioning & Refrigeration News, by permission of the General Electric Co.

The first instalment, Sept. 28, covered the fundamental design features of the General Electric household electric refrigerator system.



We protect soldier's food by making refrigeration equipment for the armed forces at the home front and abroad. Most of our capacity is taken up by this essential war work.

If you will have patience with us, you will find us always willing to cooperate with you as far as these trying conditions permit.

"MARLO MEANS HEAT TRANSFER EQUIPMENT"

MARLO
COIL COMPANY
ST. LOUIS, MISSOURI

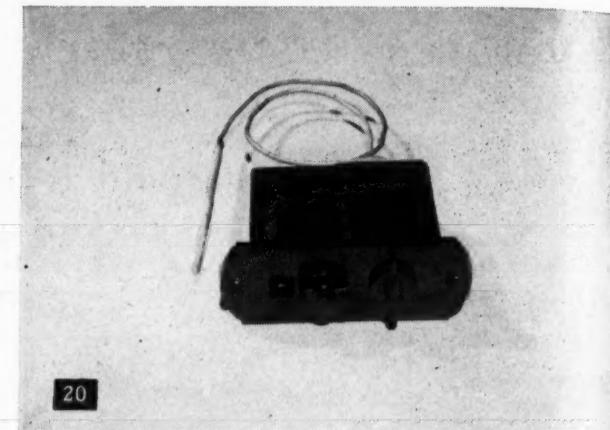
BUY WAR BONDS AND STAMPS

Servicing the G-E Scotch Yoke Refrigerator Machine

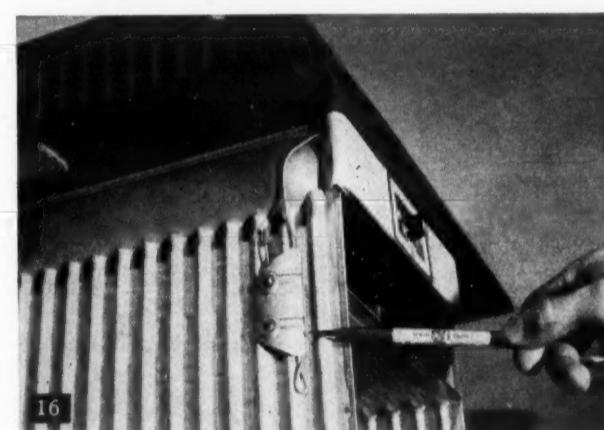
From the General Electric Service Dept. Educational Film of the Same Name
(INSTALMENT 2: OPERATION OF THE TEMPERATURE CONTROL)



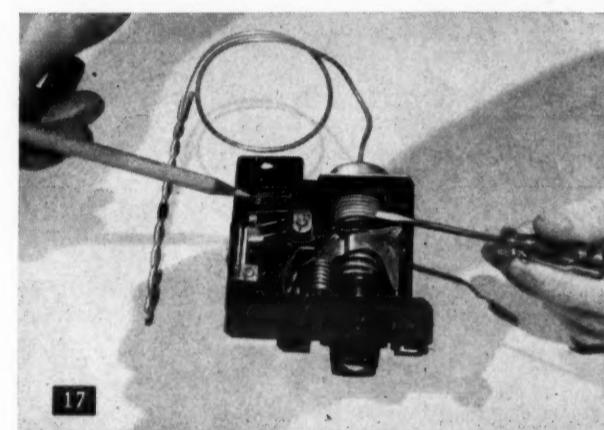
(15) The temperature control is designed to automatically start and stop the machine.



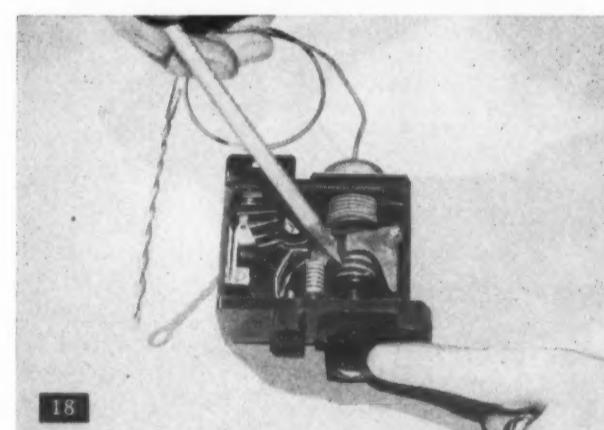
(20) Two-knob controls used previous to 1938 had manual-reset overloads. However, since 1938 the overload is an automatic reset type and is part of the starting relay.



(16) In all cases this is accomplished through a gas charged bellows that has a tube extension tightly clamped to some point on the evaporator.



(17) Temperature changes of the evaporator greatly affect the pressure in the bellows, causing it to expand or contract. This movement of the bellows actuates electrical contacts in the control, which open and close the circuit to the motor.



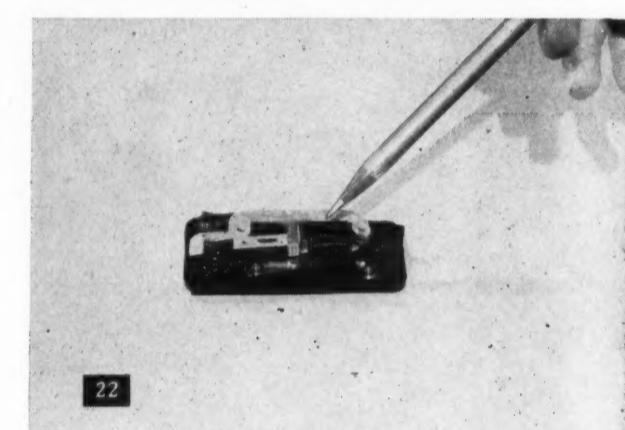
(18) A spring limits the expansion of the bellows so that the contacts are opened and closed when the evaporator reaches predetermined temperatures. Moving the control knob changes the spring tension. Naturally, this alters the evaporator as well as the cabinet temperatures.



(19) The control also provides a manual on-and-off switch and a device for defrosting the evaporator while maintaining partial refrigeration.



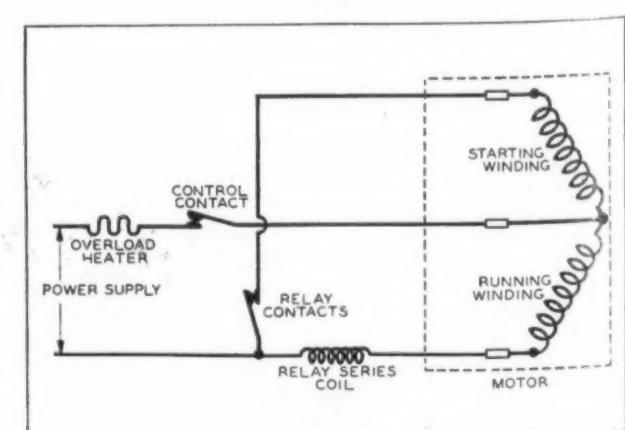
(21) The function of the starting relay is to control the flow of the electric current to the motor, which has two windings—a running winding and a starting winding.



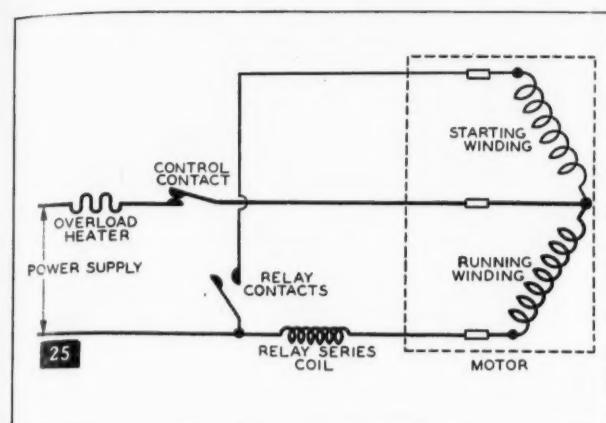
(22) At the moment of starting, a relatively high current is drawn through the relay coil, in series with the motor running winding.



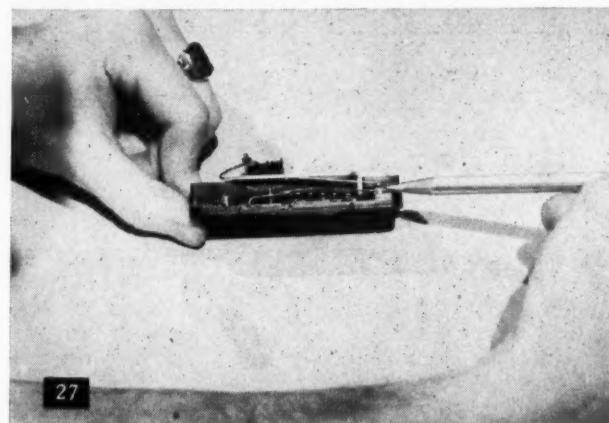
(23) The magnetic force set up in the coil by the current pulls the relay armature down and closes the starting contacts.



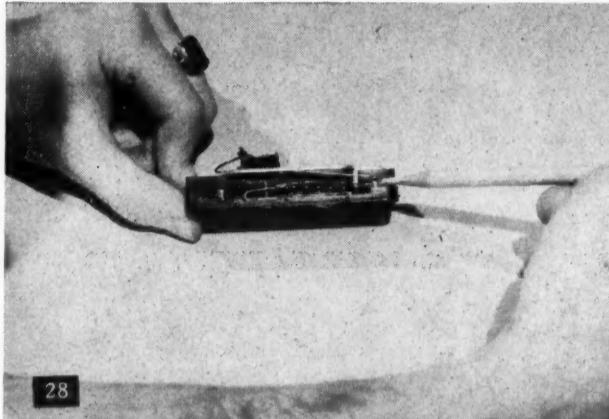
(24) With these contacts closed, the starting winding is connected in parallel with the running winding and the torque (or turning force) supplied, easily starts the motor.



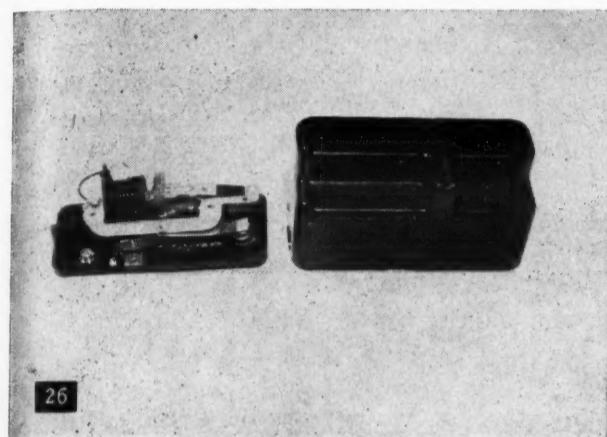
(25) As the motor comes up to speed, the current is reduced—which lessens the magnetic force acting on the armature and it springs up. The starting contacts are now open and the motor runs as a single phase induction motor, with only the running winding in the circuit.



(27) This consists of a bi-metallic strip, heater and electrical contacts. Excessive motor current flowing through the heater causes the strip to flex and opens the contacts.



(28) With the machine off, the strip cools, flexes back and closes contacts, re-starting the motor. A continuous overload results in repeated opening and closing of the contacts. This indicates trouble which should be investigated.



(26) The Type "R" relay used since 1938 has an automatic reset overload device that protects the motor.

COOPERATION WINS THE WAR



WOLVERINE SALUTES REFRIGERATION SUPPLY JOBBERS

The National Refrigeration Supply Jobbers Association was founded in 1935, and its membership now numbers 113 companies and their 40 branches.

The objects of the Association are ably set forth in the by-laws: "...to advance and protect the business interests of jobbers of refrigeration and air-conditioning equipment, parts and supplies and to promote cooperation among the members."

A further purpose of the Association is to effect closer cooperation between the jobbers and the manufacturers.

Today, Wolverine is happy to salute this outstanding organization for its eminent success in achieving its broad-minded and highly worthwhile aims.

To the National Refrigeration Supply Jobbers Association, and to the entire refrigeration industry, we at Wolverine, producers of highest quality refrigeration tube, pledge continued cooperation—the utmost of which we are capable, now and in the future.

"Cooperation wins the war"—and when the war is won, unbroken and whole-hearted cooperation on the part of all of us in the industry will advance the progress of refrigeration even beyond any point yet reached.



MR. ALEX. H. HOLCOMBE, JR.
President of the National Refrigeration
Supply Jobbers Association

WOLVERINE TUBE DIVISION
OF CALUMET AND HECLA CONSOLIDATED COPPER COMPANY
Seamless COPPER • BRASS • ALUMINUM
1413 CENTRAL AVENUE • DETROIT, MICHIGAN

Dealer Overhauls Service Department, Puts It on a Profit Basis and Tells Other Dealers How to Make Service Pay

NEW KENSINGTON, Pa.—That appliance service is rapidly increasing in importance and can be made to pay a profit is the opinion of W. R. Gott, appliance dealer here, who recently pulled his service business out of the red onto a profit basis.

Previously Mr. Gott had allowed appliance sales to offset service losses, but with new appliance supplies at a minimum, he decided a reorganization in his service operations was in order. In setting up a new system, he considered it vital that the dealer maintain customer goodwill and that customers be helped to conserve their present appliances during the War.

SERVICE CHANGES

Following are the steps taken by Mr. Gott in overhauling his service department:

- Allocation of proper costs and credits to the operation. In this case, the combined salaries and automobile expenses are considered the base costs. If the actual labor charges equal this amount, then the profit on parts will provide a sufficient margin to make the operation attractive.

- Arrangement of facilities and cataloging of parts so that work can be handled quickly and efficiently. Tools on hand were adequate.

- Procurement of stocks of standard parts sufficient to take care of normal requirements for a period of six months.

- Salvaging of all usable parts from traded-in appliances which cannot be reconditioned. These are offered to customers at one-half the list price of new parts.

- Establishment of a system of handling service calls to eliminate unnecessary unprofitable trips, to speed up work, and to avoid errors and customer dissatisfaction.

- Placement of all service work on a C.O.D. basis to avoid collection expense.

TELEPHONE IMPORTANT

"Actually, an efficient service operation begins with the intelligent handling of the telephone calls," the dealer pointed out. "When a customer calls, I ask a lot of questions, if necessary, in order to find out exactly how the appliance is operating or is damaged. This makes it possible to give the customer a fairly accurate estimate of repair cost. Where there is no real trouble, you can tell the customer what to do, thus saving trips where the proper charge for the time involved would not seem justified to the customer and avoiding the loss of money to retain goodwill.

"Where possible we try to get the customer to bring the appliance or part in by telling her that it might be several days before we can get out and suggesting she bring it in on her next trip to town. This saves the customers' money and our tires. Most persons very readily accept these suggestions. When it's necessary to go to the home, we schedule calls to keep our time and mileage to a minimum."

SERVICE REGISTER

"Every service call is entered in our Service Register," declared Mr. Gott, further outlining his store's service system. "Each entry includes the customer's name, date, nature of the work, estimate made, date promised, and any other pertinent information, such as special parts which must be ordered. A Service Card is also made up and given to the Service Manager.

"Each appliance or part received is immediately tagged. When the work is completed, the price is marked on the tag. As parts are received from suppliers, they are tallied in and checked against the Register to avoid delays. When a customer calls in regard to an appliance we are repairing, the Register is ready for reference.

One of the more profitable items in the Gott service setup is the reconditioning of traded-in washing machines. In most cases, Mr. Gott stated, only a few minor parts are needed to replace worn-out ones, a new set of rolls is installed, the metal parts cleaned up, and the tub and undercarriage repainted. The service department receives a credit of \$5

on each washer, exclusive of parts.

Even at a generous mark-up, the resale prices are attractive to customers, resulting in rapid turn-over for reconditioned washers, Mr. Gott reports.

Two items which offer good possibilities for profits on a volume basis. Mr. Gott believes, are refrigerator door seals and the padding and covering of ironer rolls.

"I believe I'd do everything I could to keep myself identified with the appliance business," is Mr. Gott's advice to dealers contemplating turning to other lines. "If I were mechanically inclined, I'd handle my own service, if necessary, and cut all my overheads I could. I think I could make enough to get by, even if I had difficulty in getting electrical merchandise. This situation won't last forever, and when it's over, the dealer who has maintained his business and continued to give service will be in position to go to town."

ADVICE TO OTHERS

The dealer who has done little or no servicing and who has been in the appliance business for a comparatively short time must go to greater lengths in establishing himself in service work. Following are some of his chief considerations:

- He must survey his market to determine the size of the potential volume of service in his territory.

- Having decided that the potential volume is sufficient, he must next consider his own part in the business. If he has had experience in service work or if he is mechanically inclined and is willing to take an active part in the business, his position is good. If he does not have these qualifications, he must make up his own mind that it will require a very determined effort to learn the business thoroughly and quickly.

- Assuming that conditions warrant his going ahead, he must next estimate the volume of service he can get. In doing this, he can figure on his established customer contacts and the probabilities of effective advertising. Arriving at an estimate, he must then compute his overhead. If he is employing servicemen, he must know how to get his money's worth by keeping them on productive work. He will need proper equipment and space to enable the work to be done efficiently. He must consider whether the rent for his present location is in correct proportion to his volume. It may be that a cheaper location will be adequate, making it advisable to move.

BUILDING BUSINESS

The dealer, on the other hand, has one big advantage in his knowledge of merchandising. He will know how to sell his services to the public and how to develop business through advertising and canvassing. He will understand the appeal of specials.

Some of the things he can do to build up volume include:

- The offer of an inspection service at a nominal rate to discover prospects for major repairs.

- Direct mailing his old customer lists for refrigerator door seals and ironer pads and covers.

- The reconditioning of traded-in merchandise, particularly washers and cleaners, and re-sale at profitable prices.

3 CATALOGS IN 1

HERMETIC UNITS - COMPRESSORS - PARTS
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WRITE FOR YOUR COPY ON YOUR LETTERHEAD

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For: TRUCKS, LOCKERS, COOLERS, COUNTERS
AND CABINET CONVERSIONS, use:

KOLD-HOLD PLATES

KOLD-HOLD MFG. CO.
LANSING, MICH. U.S.A.

Notes from the Locker Conclave

Some Notes of Pessimism, Some of Optimism

J. M. Card, plant operator of Eaton Rapids, Mich., and secretary of the Michigan Locker Association, and D. E. Younker, operator of plants at Lapeer and Oxford, Mich., expressed the fears of most operators concerning the effects of meat rationing on the locker industry. These men feel that any restriction on the amount of meat put into storage would so seriously cut processing revenues that many plants might be forced out of business.

Only evident optimist about the rationing program was one operator from Eastern Pennsylvania who declared many gas station owners today are making more money than

before rationing began. The secret, he said, is in extra service. In locker plants not only might extra attention to the profit possibilities of fruit and vegetable processing take up the slack today, he stated, but may pave the way for far greater profits after the war.

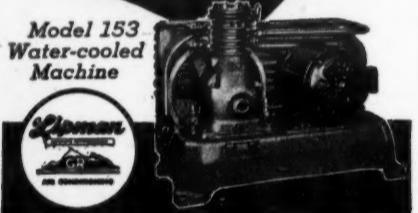
Generally speaking, meetings of operators were more widely attended at the convention this year than ever before. Indicative of the host of problems facing operators was the widespread and vociferous participation of members in panel discussions.

As a wartime measure, exhibits were restricted to room displays by manufacturers and no general exhibit booths were allowed. Displaying ingenuity—and the effects of materials shortages—many changes were evident in construction of frozen food lockers on display. Instead of the conventional steel, wartime lockers are now on the market made of fiber board, and another manufacturer, Master Refrigerated Locker Systems, Inc., has a unit equipped with steel frame and doors, and masonite tops, bottoms, sides, back,

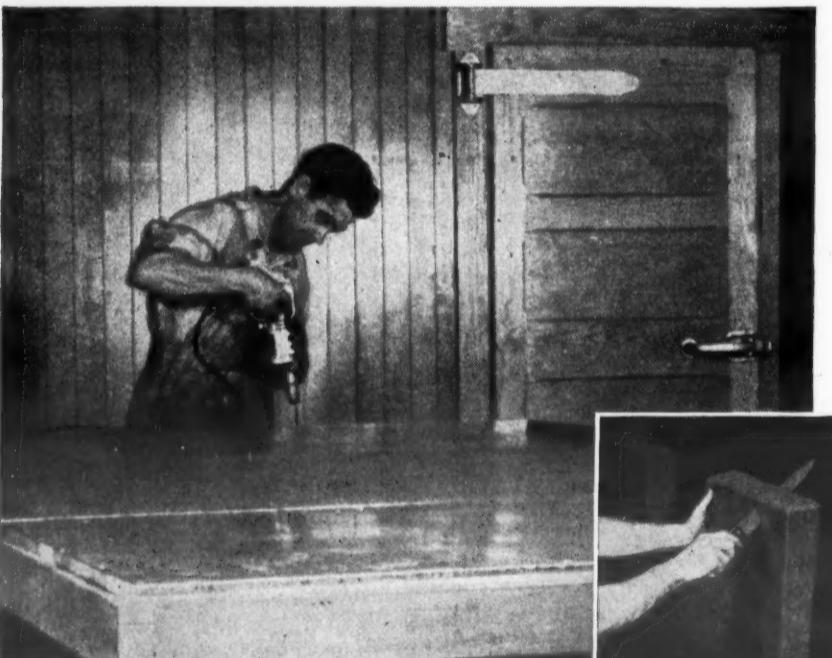
MOTORS for every
AIR-CONDITIONING AND
REFRIGERATION REQUIREMENT
WRITE FOR FREE DESCRIPTIVE BULLETINS

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6441 Plymouth Avenue, St. Louis, Mo. U.S.A.

**The Machine For
Your Next Job...**
It's a refrigeration job
...no matter how big or
how small...we can supply
Lipman equipment
to fit the specifications.
Let us work with you.
GENERAL REFRIGERATION DIVISION
Yates-American Machine Co.
Dept. AC-3, Beloit, Wis.

Model 153
Water-cooled
Machine


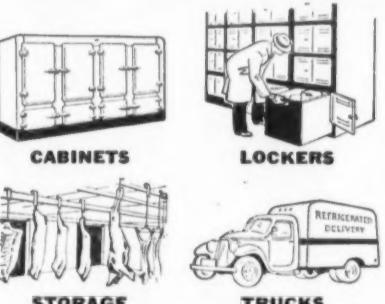
One operator who believes much of the industry's woes can be attributed to lack of educational work by the locker field is charming and vivacious Mrs. Carolyn H. Cheney of Jamestown, N. Y. Taking opportunity by the forelock, Mrs. Cheney has corresponded with such dignitaries as Mrs. Roosevelt, the Duchess of Windsor and Walter Fuller, president of the Curtis Publishing Co. (who made a trip through the Cheney locker plant recently). In addition to providing more nutritious food and saving transportation, Mrs. Cheney contends, the local freezing and locker storage plants, if properly promoted now, can be put in such postwar demand that many plants can be kept busy after the war, producing new locker installations.



One glance shows you why IT WON'T SAG OR SETTLE!

TIME after time commercial and domestic refrigerator manufacturers have put panels of Zerocel through severe drop and bump tests. In no case has there ever been the slightest indication of settling. That's easy to understand when you inspect this lightweight, batt-type material. Even when compressed its springy, tough, interlaced fibers with resilient binder, bounce right back into original position.

Two inches of this efficient low temperature insulation do the work of $2\frac{1}{2}$ " of many block or board materials—yet it weighs only half as much and costs about one-third! Construction is simplified. Doors, for example, can be lighter, need fewer hinges. As shown above, Zerocel cuts easily with an ordinary knife. It isn't brashy, handles better, and being self-supporting, is easy to install. It's fireproof, water-repellent, non-capillary, immune to fungi and vermin—and can't absorb odors. Get all the facts today—send for details and specifications.



WRITE TODAY FOR FULL STORY on this efficient, low-cost insulation Zerocel. Our staff of insulation engineers will be glad to suggest details and recommendations on specific problems. Address Industrial Sales Division, National Gypsum Company, Buffalo, New York.

GOLD BOND
ZEROCEL

NATIONAL GYPSUM COMPANY, BUFFALO, N. Y.

As a College Sees It

Locker Plants Must Offer Better Foods at a Cheaper Price

Texas A&M Has 4-Year Course on Management

KANSAS CITY, Mo.—How a college that offers a four-year locker management course for its students looks at the refrigerated locker plant field as a career for its graduates was outlined by Prof. C. E. Murphrey of the Texas A. and M. College at the recent National Frozen Food Locker Association annual convention here.

"We have never been of the opinion that a college graduate should be interested in the managing of a small locker plant with only very limited services," Prof. Murphrey declared. "We have taken the attitude that in order for it to justify the services of a college graduate a locker plant should be a rather complete food processing plant of such a size and diversity that a full time manager with a rather wide knowledge of food handling would be required and we are optimistic enough about the future of the locker industry that we feel sure that such plants will be numerous and managers with a full knowledge of food handling will be in good demand."

"It also seems that it may occur sooner than expected in view of our present critical situation. Not that there is not a place for the many smaller more limited service plants that are performing a valuable service to their communities.

ANIMAL HUSBANDRY FIRST

"In light of these thoughts a four-year curriculum was worked out which was similar to our regular animal husbandry course, but different mainly in the elective courses available. Animal husbandry, in case you are not familiar with college curricula, consists of study in production, feeding, breeding, marketing, etc. of beef cattle, sheep and goats, hogs, and horses and mules. By carefully selecting courses, students could get practically all of the regular animal husbandry courses and in addition take extra courses in horticulture, dairy products, poultry and its products and in physics and refrigeration and machine operation.

"Inasmuch as this course has been available only a short time we naturally have not been able to graduate anyone with the full four-years work; however, in the meantime we have been offering our locker management course which has been quite popular with students thus far. Inasmuch as all of them have not had these other specialized courses in horticulture, etc., before they take our locker course it is necessary to give them as much of this material as possible in the short time available.

"Students taking our locker course get rather intense training in slaughtering, cutting and grading of all kinds of meat, also limited experience in curing and smoking of pork and processing fruits and vegetables. They are responsible, under supervision, for processing all meats for the 220 lockers. These lockers are rented largely by college employees who live in the small community surrounding the college. At present all of the lockers are rented and, in addition, we have a long waiting list. This in a community of about 2,000 population speaks for its popularity.

WHAT THE PLANTS NEED

"If there is any one thing which we attempt to impress on our students it is that a locker plant to be a success must be able to first provide foods for its patrons at a cheaper cost or it must be able to furnish a better product than can be procured at retail or by preserving by other methods. A locker plant, if managed correctly, can do both of these things and I am sure that if you note the locker plants that have failed one or both of these things have not been provided.

"Consequently we have some very definite ideas, for instance, about cutting meats which are in direct conflict with accepted retail practices but which we feel are to the direct benefit of the locker patron. We are definitely of the opinion that, especially in the case of meat, unless a patron can get his meat cut to better advantage and at the same time have better quality meat at a saving then there is not much ex-

istent that one of the most fertile fields for expansion will come in catering to city patrons.

"I am not in agreement, however, with the practice of a few plants located in cities in our state that have as high as 5 cents per pound brokerage charge in addition to high processing charges and rentals."

DOLE
VACUUM PLATE
COOLING & FREEZING UNITS
CHICAGO

MOISTURE'S MASTER
DAVISON'S
SILICA GEL
—USED IN ALL WELL-KNOWN DRYERS
YOUR JOBBER CAN SUPPLY YOU

PENN Seamless
Brass and Copper Tubing
PENN BRASS & COPPER CO.
ERIE, PENNA.

We Sell Only Thru
Distributors of refrigeration and insulation.
Get particulars on our
SAF-T-LOC Individual Lockers
and the New "2 in 1" convertible.
Master Refrigerated Locker Systems, Inc.
121 Main St. Sioux City, Iowa
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Use CHICAGO SEALS
for seal replacements
A complete line in all sizes
CHICAGO SEAL CO.
10 North Wacker Dr., Chicago

REFRIGERATION PRODUCTS
feeders
BUFFALO, N. Y.



Doing Double Duty

- Refrigeration valves, fittings and accessories will, in all probability, be doing double duty for many months to come. In the meantime, it is of the utmost importance that those products which you can procure are dependable and will function for the "long haul".
- If you are in difficulties, write us. We will do our very utmost to help.
- Mueller Brass Co. products have a reputation for quality and long life.

MUELLER
BRASS CO.
PORT HURON, MICH.

Coast Group Discusses Tire Rationing & English Gov't 'Panel' Surveys Tank Cooling

(Concluded from Page 1, Column 3)

cars for service work.

Warning that recaps and new tires for the refrigeration and air conditioning industry are largely confined to servicemen, Mr. Miller pointed out that only salesmen of food products are eligible for rationing board consideration. He did, however, state that automobiles used 90% or more for the transportation of "executives, engineers, technicians or workers" engaged in direct war work could obtain Victory Rubber recaps.

"Tire Rationing Board members generally are businessmen," concluded Mr. Miller, "and are reasonable in considering the needs of business firms. Therefore, I make this suggestion to firms in this business: If an executive member of the firm, a representative of which is seeking recaps or new tires, will write to the Rationing Board giving specific facts concerning the applicant's need for rubber, the request generally will be granted, if justified."

In response to questions from the audience concerning the eligibility of executives supervising service work but not actually doing the work themselves, Mr. Miller expressed the opinion that most boards would require such persons to use public transportation. This would be the case, he added, even if frequent trips by such personnel were required, and even if such trips required the transportation of "50 pounds" of service equipment. Unless such travel accounted for 90% or more of the miles on the car used, he concluded, there is little chance of approval for recaps.

In response to another question concerning the status of a district representative of a manufacturing firm, Mr. Miller agreed that use of the automobile was the determining factor—whether 90% or more for business, and whether for sales work or actual engineering, service or installation jobs.

Outlining the method of appeal from adverse opinions of local Boards, Mr. Miller stated that denials from such boards can be appealed to the State Rationing Administrator.

Following Mr. Miller's talk, and an added suggestion that servicemen organize local groups to split service calls by areas not only as a means of saving rubber but as a means of indicating to local boards that a sincere rubber conservation effort was being made, Mr. Pratt appointed a committee to work out details and a plan of action to handle this growing problem.

Mr. Rausch, addressing the meeting on the need for redistribution of excess inventories, pointed to the efforts of several Eastern firms and organizations in trying to solve this situation, and called on West Coast jobbers, manufacturers, distributors, dealers, and servicemen to form an organization to solve such problems in this area.

In taking over the meeting, Mr. Reinach, of the WPB, assured members of the industry in attendance, that the WPB would be more than willing to work with such a committee on inventory redistribution.

Entering the discussion, A. B. Schellenberg, president of Alco Valve Co., pointed out to jobbers and manufacturers that this is an ideal time to clean out old inventories. After the war, he stated, this industry may not have the same practices, the same types of equipment.

"This bank of parts and equipment we have clutched to our hearts during the past several months may be useless after this thing is over," Mr. Schellenberg warned, "and we may never again have the opportunity to dispose of the excess, slow moving inventories that we now have."

Speaking of priorities, Mr. Reinach urged a closer observance of priority regulations and more study of the rules affecting this field.

"Your knowledge of priority orders today is as essential as your knowledge of buying and selling products," he stated.

In response to a plea from Mr. Schellenberg that WPB clarify its position in regard to conflicting orders from different branches of WPB, and particularly regarding so-called "overlaid" orders restricting uses of certain metals even though priorities have been granted

for the refrigeration products in which they are used, Mr. Reinach said:

"What you say is true, but let us keep in mind the fact that different ratings and restrictions have been established for manufacturing, distribution, and service functions. The fact that a relatively low priority rating will allow movement of goods from the hands of the latter groups does not mean that a similar priority will or should move similar items from the hands of the manufacturers or more especially, materials to fabricate them from the hands of a materials producer."

Summarizing the situation regarding priorities on already-installed refrigeration equipment, Mr. Reinach concluded, "I believe that on any existing equipment, the government will bend backwards to help get parts and to keep that equipment running."

(Concluded from Page 1, Column 3)

either by use of refrigeration or air conditioning.

Mr. Lyttelton said that the panel consisted of: S. A. Wood, Senior Scientific Officer in the Ministry of Supply Scientific Research Department; Dr. S. F. Dorey, Chief Engineer Surveyor, Lloyd's Register; and Dr. E. Griffiths, Principal Scientific Officer in the Physics Department of the National Physical Laboratory. They "consult freely with appropriate specialists in other government departments and in industry on the various problems of research, development, and manufacture."

In answer to the question as to whether any of these men or any of their advisers had been to the Western Desert to get any actual experience in tanks, and if not, would the Minister of Production take care to send somebody there, Mr. Lyttelton stated that the men would have advice and reports from the Desert.

Army Cites Economies In Frozen Foods Use

(Concluded from Page 1, Column 4)

from waste as characteristics of the chosen foods, Col. Beyette pointed out the economies in storage and shipping that would result from the new frozen foods plan.

The method of procurement, it was stated by Quartermaster Corps purchasing officials, will be announced in the near future, following a series of conferences between War Department representatives, food authorities in other government agencies and leaders in the industry.

The decision to use quick-frozen foods on a wide scale for the first time in Army history follows closely a series of successful test feedings of these foods in large posts and camps located in all parts of the country.

In commenting on the decision, Major General Edmund B. Gregory, the Quartermaster General, pointed out: "Because of their compactness

and waste-free nature, these foods will provide significant economies in both transportation facilities and valuable warehouse storage space.

"Important, too, is the fact that quick-frozen foods will give our troops the year-round service of fresh vegetables and fruits not ordinarily available except during their comparatively short growing seasons. They will help us immeasurably in providing the wholesome, nutritious meals which are so necessary to the health and efficiency of our troops."

Harry Newcomb Elected Servel Vice President

(Concluded from Page 1, Column 4)

plants. Before joining Servel's staff, Mr. Newcomb was commercial sales manager of the Norge division of the Borg Warner Corp. in Detroit. His work with refrigeration began in 1926 when he left the automobile business to become sales manager for Copeland Products in Detroit and Mt. Clemens, Mich.



A CYLINDER SHORTAGE IS AVOIDABLE

With your immediate help we will be able to meet your orders for civilian needs

YOUR COOPERATION IN THIS PROGRAM IS NEEDED NOW—

There is no shortage of "Freon-12" but an acute shortage of "Freon" cylinders is imminent. The situation is so serious that unless we receive your assistance in getting empty cylinders back to our plant we may not be able to meet all orders for civilian requirements.

You can prevent this from occurring. In this statement we explain why this shortage threatens and how you can prevent its occurrence.

No steel for new cylinders—The steel shortage is acute as evidenced by numerous limitation orders of the War Production Board. As a result, manufacturers of refrigerant cylinders are only able to make deliveries on orders rated AA-1 and AA-2. If you have followed the priority situation, you know that it is practically impossible to obtain these high ratings for any materials for civilian needs. Thus, new cylinders for refrigerants are out of the picture. As manufacturers of "Freon," we cannot ease the shortage by purchasing new cylinders.

Cylinders adequate, if returned—The bright side of the picture is the fact that there are enough "Freon" cylinders in existence to meet civilian needs if you see that empty cylinders are returned promptly.

Unfortunately many sellers and users of "Freon-12" have not returned cylinders as promptly as they should and this will soon lead to a serious situation, if not corrected. To forestall the threatened shortage and its consequences, we appeal to you to assist in carrying out the program outlined in the box at the right.

What This Means to You

It's a patriotic duty of every reseller and user of "Freon-12" to get these empty cylinders back. We do not think we are stretching a point when we say it is as patriotic to make a special effort to return cylinders as it is to help collect iron and steel for the scrap drive.

By making one cylinder do the work of two you release steel for bombs, tanks and other armament needed to fight the Axis. Furthermore, cylinders help maintain this nation's health with the refrigeration they make possible.

Avoids stricter regulation—There have been rumors that WPB would have to resort to unusual methods of allocation. This need not be

A 4-POINT PROGRAM

To Prevent a Cylinder Shortage and Insure Adequate Deliveries

1. CHECK RECORDS NOW and find out who has cylinders in which you sold "Freon" this year.

2. TELEPHONE every customer who has "Freon" cylinders and urge him to return empties at once.

3. SEND TRUCKS to bring in cylinders that cannot otherwise be obtained.

4. SHIP EMPTIES to Kinetic Chemicals, Inc., Carneys Point, N. J.

necessary if each reseller and user makes a drive now to return empty cylinders.

Helps assure your supply—There is no lack of plant capacity or of raw materials for making "Freon-12." You and we, by working together, can lick this situation. Your efforts will not only be appreciated but will be reflected by prompt deliveries of "Freon-12" to you and your customers.



FREON

REG. U. S. PAT. OFF.

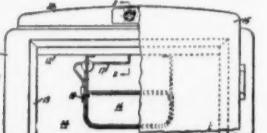
safe refrigerants

"Freon" is Kinetic's registered trademark for its fluorine refrigerants.

PATENTS

Weeks of Sept. 8 and 15

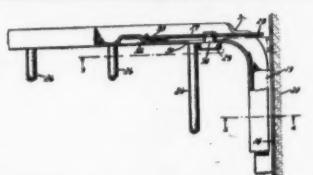
2,294,686. REFRIGERATOR CABINET. Delbert F. Newman, Schenectady, N. Y., assignor to General Electric Company, a corporation of New York. Application Dec. 13, 1941, Serial No. 422,893. 8 Claims. (Cl. 62—2.)



1. In a refrigerator of the type having spaced-apart inner and outer walls defining a food storage compartment, thermal insulation between said walls, refrigerating means for cooling the storage compartment, and temperature responsive means for controlling the temperature within said compartment, said temperature responsive means having a shaft extending therefrom for providing means for the manual adjustment of the temperature responsive means, said outer wall having an opening, said control means being disposed so that said shaft is aligned with said opening, a knob removably carried by said shaft, means for sealing the space between said knob and said outer wall in order to prevent the passage of moisture into said thermal insulation and for minimizing heat leakage through the opening, said means comprising a substantially cup-shaped member extending through said opening between the edges of said opening and said knob and having an aperture aligned with said shaft and said opening, sealing means between said cup-shaped member and said outer wall, and additional sealing means between the edge of said aperture and a portion of said knob.

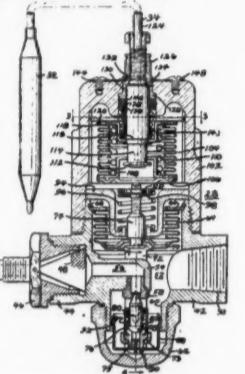
2,294,749. REFRIGERATOR CABINET. George C. Harbison, Erie, Pa., assignor to General Electric Company, a corporation of New York. Application April 22, 1941, Serial No. 388,778. 3 Claims. (Cl. 312—188.)

2. In a cabinet having interior rear and oppositely disposed side walls, an elongated shelf supporting member on each of said side walls, a shelf including a



border frame of substantially U-shape in cross-section and extending around the side and rear portions of the shelf, said frame having an open side disposed outwardly, said supporting members being slidably received in the side portions of said frame members, means including a stop member for limiting outward sliding movement of said shelf, said stop member being slidably carried within the rear portion of said border frame, horizontal portion of said frame in the vicinity of a rear corner of the shelf being formed inwardly to provide reinforcement for said slide stop member.

2,294,988. REFRIGERATING APPARATUS. Daniel L. Kaufman, Dayton, Ohio, assignor to General Motors Corp., Dayton, Ohio, a corporation of Delaware. Application May 28, 1937, Serial No. 145,317. 4 Claims. (Cl. 285—25.)



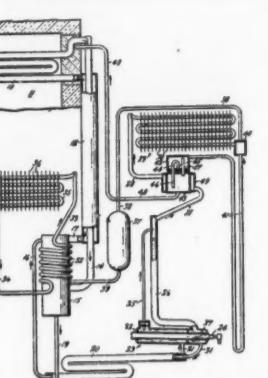
1. In combination, a casing means for confining a gas and provided with an aperture therein, first means for providing a connection between the exterior and the interior of said casing means extending through said aperture, a single rotatable adjustment means cooperating with the first means and the casing means and having a bearing upon one of said cooperating means and being in threaded engagement with the other of said cooperating means for adjusting the position of the first means with respect to the aperture in the casing means, and a gas-tight sealing member located within the casing means and held in sealing engagement with the casing means.

2,295,064. REFRIGERATION. Hugo M. Ullstrand, Evansville, Ind., assignor to Servel, Inc., New York, N. Y., a corporation of Delaware. Application March 17, 1938, Serial No. 196,318. 12 Claims. (Cl. 62—119.5.)

1. In a refrigeration system of a type employing a pressure equalizing auxiliary medium and having an evaporator, a vessel connected to receive liquid from said condenser, a conduit to conduct liquid upward from the lower part of said vessel to said evaporator, means including a heater to heat liquid in said vessel to

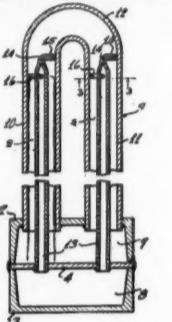
2,295,068. MEANS FOR DISTRIBUTING LIQUID REFRIGERANTS. George M. Klencker, St. Louis, Mo., assignor, by mesne assignments, to William P. Gruner, St. Louis, Mo. Application March 24, 1938, Serial No. 263,885. 6 Claims. (Cl. 62—126.)

1. In a refrigeration system of a type employing a pressure equalizing auxiliary medium and having an evaporator, a vessel connected to receive liquid from said condenser, a conduit to conduct liquid upward from the lower part of said vessel to said evaporator, means including a heater to heat liquid in said vessel to



form vapor in the upper part thereof, such vapor being capable of exerting pressure in said vessel to force liquid therein downward and thence upward in said conduit, and means including a liquid accumulation chamber and a siphon to transfer liquid from said chamber to said vessel only when a given quantity of liquid has accumulated in said chamber, whereby operation of said first-mentioned means is prevented until said vessel contains a quantity of liquid considerably greater than that which will obstruct vapor passage in said conduit.

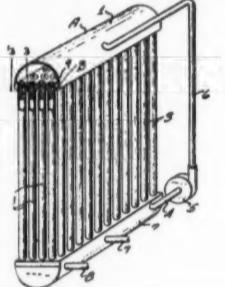
2,295,087. FLUID COOLING APPARATUS AND METHOD. George M. Klencker, St. Louis, Mo., assignor, by mesne assignments, to William P. Gruner, St. Louis, Mo. Application March 24, 1938, Serial No. 263,863. 8 Claims. (Cl. 62—126.)



2. A cooler comprising a shell having an inner partition for dividing the shell into first and second separate compartments, means for supplying liquid refrigerant to the first compartment, a cooler tube operably mounted on the shell for communication with the second compartment, a feeder tube operably mounted in the partition for communication at its one end with the first compartment, said feeder tube being of substantially smaller diameter than, and projecting into, the cooler tube, and a bent tube mounted in the feeder tube for communication at its one end with the interior of the feeder tube and extending outwardly therefrom into abutment with the inner surface of the cooler tube for applying liquid refrigerant to the inner surface of the cooler tube in the form of a tangential jet.

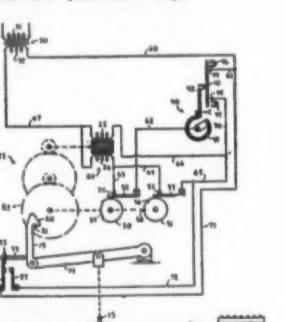
2,295,088. MEANS FOR DISTRIBUTING LIQUID REFRIGERANTS. George M. Klencker, St. Louis, Mo., assignor, by mesne assignments, to William P. Gruner, St. Louis, Mo. Application March 24, 1938, Serial No. 263,885. 6 Claims. (Cl. 62—126.)

1. In a refrigeration system of a type employing a pressure equalizing auxiliary medium and having an evaporator, a vessel connected to receive liquid from said condenser, a conduit to conduct liquid upward from the lower part of said vessel to said evaporator, means including a heater to heat liquid in said vessel to



1. Liquid refrigerant distributing means comprising a refrigerant-containing header, a heat exchanger tube sealed at its upper end and in extending through the header, a plug in the upper end of the heat exchanger tube, a tube mounted in and extending through the plug, said tube having a discharge orifice, a flat circular plate spaced from and extending transversely across said orifice for deflecting the flow of liquid refrigerant therefrom, and a plurality of annularly spaced radial baffles mounted in and projecting axially from the tube for supporting the plate in said spaced relationship.

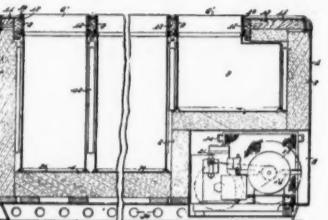
2,295,100. TEMPERATURE CONTROLLING MECHANISM. Randolph E. Di Vette, Minneapolis, Minn., assignor to Minneapolis-Honeywell Regulator Co., Minneapolis, Minn., a corporation of Delaware. Application Jan. 27, 1941, Serial No. 376,089. 10 Claims. (Cl. 236—76.)



10. In combination, a condition controlling device movable between first and second positions through an intermediate position, means biasing said device to said first position, a rotary electrical motor operatively connected to said device for moving it away from said first position, said motor having a pair of windings each substantially equal in strength to said biasing means, means including both said windings to move said device toward said second position against said biasing means, means including one only of said windings to hold said device in said second position against said biasing means, and means including the other

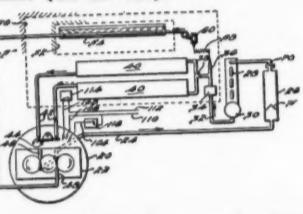
only of said windings to hold said device in said intermediate position against said biasing means.

2,295,113. REFRIGERATOR. Wayne D. Jordan, Chicago, and Paul D. Van Vliet, Galesburg, Ill., assignors to the Liquid Carbonic Corp., Chicago, Ill., a corporation of Delaware. Application July 15, 1938, Serial No. 284,680. 13 Claims. (Cl. 62—95.)



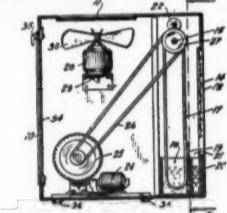
1. A combined storage receptacle and evaporator for refrigerators comprising a substantially rectangular inner sleeve having a closed bottom and an outer sleeve having channels or corrugations former thereto extending horizontally thereof and inter-connected to provide two continuous refrigerant passages between the inner and outer sleeve, said outer sleeve having a gas-tight conjunction with the inner sleeve between and outside of said corrugations and having incisions in the material thereof between and parallel with the corrugations at the bend points of the outer sleeve.

2,295,124. REFRIGERATING MECHANISM. Glenn Mufly, Springfield, Ohio. Application May 25, 1937, Serial No. 144,688. 19 Claims. (Cl. 62—116.)



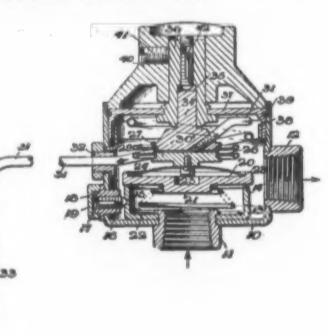
1. In a refrigerating mechanism, in combination, refrigerant, condensing means provided with independent suction ports and adapted to simultaneously exert independent suction effects therethrough, a pair of evaporators, means for delivering refrigerant from said condensing means to said evaporators in parallel including refrigerant regulating means controlling the flow of refrigerant to one of said evaporators and to a second refrigerant regulating means in series with the first mentioned regulating means and with the other of said evaporators, a suction duct connecting one of said evaporators to one of said suction ports, and a separate suction duct connecting the other of said evaporators with the other of said suction ports.

2,295,125. AIR CONDITIONER. Evert Mosher, Lamar, Colo., assignor of one-half to C. W. Switzer, Eads, Colo. Application Nov. 26, 1941, Serial No. 420,752. 3 Claims. (Cl. 261—30.)



1. An air conditioning unit comprising: A cabinet having an air discharge opening, one face of said cabinet being open; a humidifier casing secured over the open face of said cabinet; an intake opening in said casing; a water reservoir extending across said casing below said opening; a belt roller extending across said casing below said opening; an endless absorbent belt suspended from said roller and depending into said reservoir; motor means for rotating said belt roller; and a pressure roller acting to press said belt against said belt roller.

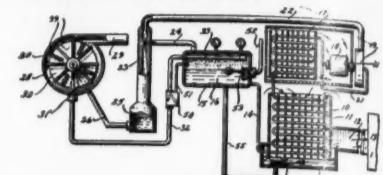
2,295,127. TEMPERATURE REGULATOR. Louis M. Fuster, Knoxville, Tenn., assignor to the Fulton Siphon Co., Knoxville, Tenn., a corporation of Delaware. Application July 12, 1940, Serial No. 345,223. 19 Claims. (Cl. 236—99.)



1. In a temperature regulator of the type employing a thermostatically controlled valve mechanism which may be subjected to fluctuations of temperature at or adjacent to said valve mechanism, in combination with a thermostat, a single means associated with the thermostat and

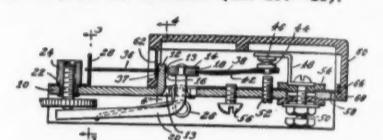
constituting a combined compensating thermostat for said temperature variations and the sole provision for absorbing overrun of the thermostat after the valve member has engaged its seat, said means move relatively to each other both for compensating temperature variations and for absorbing overrun.

2,295,142. AIR COOLING SYSTEM. Frank P. Forman, Long Island City, N.Y. Application March 15, 1938, Serial No. 282,014. 6 Claims. (Cl. 62—152.)



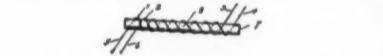
1. A refrigeration system comprising a conduit forming a closed circuit for the flow of a liquid including an evaporator chamber, means to supply liquid thereto, a cooling coil in the conduit for receiving a liquid from the lower part of the evaporator chamber, a liquid propulsion means forming part of the circuit receiving a liquid from the coil and having a discharge conduit including an ejector device forming a part of the first named conduit, the ejector device having a suction port connected to the upper part of said evaporator chamber, a discharge port connected with the upper part of the evaporator chamber, and means included between the ejector discharge port and evaporator chamber to separate gas from liquid returned to the evaporator chamber from the ejector.

2,295,143. THERMOSTAT. Norman C. Fetter, Freeport, Ill., assignor to Micro Switch Corp., Freeport, Ill., a corporation of Illinois. Application Aug. 3, 1940, Serial No. 350,602. 10 Claims. (Cl. 297—15.)



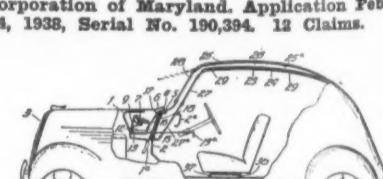
1. In combination in a thermostatic device, a snap acting toggle having a tension strip and a compression strip connected together, the connection between them being rigid to permit the transmission of bending moments therethrough from one strip to the other, one of said strips consisting of resilient thermostatic bimetal, a toggle support for said bimetal strip intermediate its ends and so constructed as to permit bending moments to be transmitted along said bimetal strip past said toggle support, a toggle support for the other strip, each of said toggle supports imposing longitudinal stresses on the strip that it supports, and an outer support for restraining motion of the extended outer end of said bimetal strip, said outer support being spaced out far enough from the toggle support of said bimetal strip that said portion between said toggle and outer supports supplies a substantial part of the driving effort imposed by said bimetal strip on said toggle.

2,295,150. HUMIDITY MEASURING. Francis W. Dunmore, Washington, D. C., assignor to the Government of the United States, as represented by the Secretary of Commerce. Application Dec. 22, 1938, Serial No. 247,243. 11 Claims. (Cl. 201—63.) (Granted under the act of March 3, 1933, as amended April 30, 1928; 370 O.G. 757.)



1. A humidity responsive device comprising an insulating member, at least two bare wire conductors having a multiplicity of turns juxtaposed to the surface of said member in bifilar arrangement, and a thin exposed hygroscopic film carried by the surface of said member and the exposed surface of said conductors and in electrical contact with the said conductors, the resistance of which varies substantially continuously in response to changes of relative humidity of the atmosphere with which it is in contact.

2,295,150. VEHICULAR AIR CONDITIONING SYSTEM. Ralph P. Norris, Madison, and Dean G. Thomas, Stoughton, Wis., assignors, by mesne assignments, to Nash-Kelvinator Corp., Kenosha, Wis., a corporation of Maryland. Application Feb. 14, 1938, Serial No. 190,394. 12 Claims.



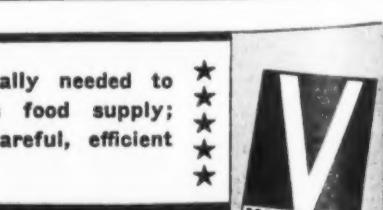
1. In combination with a vehicle of the closed type, a ventilating system including an air inlet for admitting air into the system, a sheet-like apertured air-distributing member spaced below the top of said vehicle to form a plenum chamber superjacent the passenger compartment thereof, and duct means establishing communication between said inlet and said plenum chamber, one or more openings being provided in said air-distributing

(Concluded on Page 15, Column 1)

BUY DEFENSE BONDS & STAMPS

"VIRGINIA" REFRIGERANTS AGENTS FOR KINETIC'S "FREON-12"

VIRGINIA SMELTING CO.
WEST NORFOLK, VIRGINIA



VIRGINIA

NORTHERN INDIANA BRASS CO.
ELKHART, INDIANA
VALVES AND FITTINGS SINCE 1904

Govt. Studies Plight of Small Businesses During and After War Period

Nelson Proposes War Liabilities Board To Assist Small Businesses Affected By War To Get Started Following Peace

WASHINGTON, D. C.—Creation of a War Liabilities Adjustment Board to facilitate the use of all productive facilities during the war and to assure small business enterprises the opportunity to re-enter a competitive economy after the war ends has been suggested to the Senate Special Committee to Study the Problems of Small Business, by Chairman Donald M. Nelson of the War Production Board.

Mr. Nelson made this suggestion in a prepared statement which he gave the committee. Emphasizing that "I am not presenting a bill," he added that "I should like to see your committee develop the possibilities along these lines because, by so doing, it seems to me that a great service can be done for the war effort and for the ultimate best interests of the nation."

AIMS FOR COMMITTEE

In his suggestion that the committee study the proposal for a War Liabilities Adjustment Board, Mr. Nelson urged it to give attention to steps designed:

1. To help small business enterprises adversely affected by the war take care in an orderly fashion of overhanging liabilities which under normal conditions they would have been able to discharge.

2. To provide effective mechanisms for financing small business after the war.

3. To provide effective means for giving small business technical and other assistance at the end of the war.

4. To provide a mechanism for giving to small business enterprises broken up by the war a priority in the acquisition of machinery and equipment when the war is over.

LESS CIVILIAN OUTPUT

The needs of the war program, Mr. Nelson stated, will force the country to cut civilian production and civilian activity to the bone.

"Before the war is over," he said, "we shall need to use in some way for essential purposes all the management ability we have, all the manpower we have and all the materials we have."

For this reason, Mr. Nelson said, there should be no action by government administrative agencies or by Congress that would tend to im-

mobilize or freeze into a non-productive state any of the elements of productive capacity—management, materials, labor, machinery, buildings or land. Wherever possible, he said, war work will be taken to the plants that are now in existence; but he warned that in many cases it will be necessary to move both men and machinery to other places, and that in no case can useful equipment be allowed simply to lie idle until the war ends. Machinery that cannot be put to work for essential purposes, he said, can be made a source for spare parts for machinery which is in use; failing that, it can be used as scrap for the production of steel.

"The one thing we must not do is to pack away permanently, in grease or in any other way, machinery and equipment against the end of the war," Mr. Nelson said.

"On the contrary, we must in some way know that every existing piece of machinery and equipment, regardless of whose hands it may be in, regardless of whether it is owned by a large corporation or a small shop, is available for use to win the war."

Pointing out that it may not always be feasible to ask owners to care for machinery which is to be scrapped or dismantled, until such time as it is needed, Mr. Nelson said:

"We need, I believe, to begin setting up under the authority of the War Production Board an agency to buy and hold until needed machinery and equipment in the same way that we are now buying inventories of raw materials."

Making sure that full use is made of the nation's manpower is a joint responsibility of the War Production Board and the War Manpower Commission, Mr. Nelson said. It involves finding people, training or retraining both labor and management, and putting them in the right spots.

For that reason, he said that he believed that the War Manpower Commission will institute a more intensive and extensive program for recruiting and retraining the proprietors and the workers of small business enterprises which cannot be employed in the war effort in their present concerns. Hence, he suggested that it may well prove desirable to use many of these smaller plants as training centers for practical production and management work.

Failure to Use Pools of Small Plants Charged by Senate Committee

WASHINGTON, D. C.—Failure to make full use of small plants which have been brought together in pools was charged to the War Production Board by the U. S. Senate Small Business Committee when the latter pointed out that of the 500 pools organized, 300 have been dissolved for lack of work.

In releasing a monograph entitled

CLASSIFIED ADVERTISING

RATES for "Positions Wanted," 5¢ per word; minimum charge, \$2.50. Three consecutive insertions, 12½¢ per word; minimum charge, \$6.25.

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EQUIPMENT WANTED

WANTED: Used Commercial Refrigeration and Air Conditioning. THE BIMEL CO., 306 Walnut St., Cincinnati, Ohio.

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WANTED: Will pay top price for good used air conditioning coil; 10-15 tons capacity; 12 to 16 sq. ft. face area; preferably 6 row. REFRIGERATION PRODUCTS CO., 49 Central Ave., Cincinnati, Ohio.

Loans of Smaller War Plants Corp. Will Be Made to Firms Who Will Speed Up Winning of War; Security Not Essential

WASHINGTON, D. C.—Primary objective of the Smaller War Plants Corp. in making loans to small manufacturers from its \$150,000,000 fund will be to hasten winning the war, it was made clear by the Board of Directors in a statement in respect to the Corporation's loan policy.

If a small manufacturer can show that the money he wants to borrow will help kill a Jap or a German, or in other ways shorten the war, there is a good chance that the loan will be granted. The Corporation is not going to ask for gilt-edge security. The statement follows:

"As we understand it, our corporation was empowered to make loans to smaller manufacturers desirous of engaging in war work, because these small plants often need financial assistance that they can't get through ordinary banking or government channels. The banks are eager to lend money where conventional guarantees are available; so it seems obvious that we should give consideration to factors which a bank could not be expected to take into account.

"The Corporation's objective is to expand and speed up war production and to strengthen our war economy. With this objective always before us, the first question we ask ourselves

when considering an application for a loan is: 'Will this money help kill a Jap or a German; will it help save the life of a United Nations soldier, sailor or airman; will it help win the war sooner?' If the answer to that question is a definite 'Yes,' the application has a pretty fair chance of acceptance.

"Obviously, we must give attention to the usual banking considerations and be able to see a reasonable prospect that the borrower will repay the loan—but we are not going to insist on gilt-edge security.

"Loan application forms call for the usual statements as to the financial condition of the applicant and the security available. Applicants must supply this information in detail, but we would like to receive all additional pertinent facts of a general character which will show specifically how the money will help win the war sooner.

"In instances where acceptable guarantees cannot be furnished, it may be possible to arrange some sort of control over the funds we lend and in this way get around the obstacle which has prevented loans through other channels."

Commenting on the statement, Albert M. Carter, a member of the

Board who saw active service in France in the last war, said: "This might look to some persons as though we intended to play fast and loose with the \$150,000,000 which Congress has made available to us. That would be a faulty interpretation of our policy and a bad guess as to our intentions. We have no intention of wasting a penny if we can avoid it, but we do want to be realistic."

"A soldier's life often depends on the kind of weapon he has, and how long his ammunition lasts. A raid on an enemy objective may cost the lives of 100 men instead of 50 if the attacking force is not equipped to the last degree with everything it needs. A ship may be sent to the bottom with all hands because it lacks necessary protection."

"That is the reason why, in trying to help the small manufacturers, our first consideration is going to be 'Will the loan help win the war sooner?' As a matter of fact, this is where genuine realism comes in. The only way one of our loans can help win the war sooner is by helping a manufacturer produce some needed war item. Any honest manufacturer who can do that is a good risk."

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THE ONLY THINGS DIFFERENT ABOUT A WAR PLANT INSTALLATION ARE THAT WE HAVE TO DELIVER FASTER... YOU HAVE TO WRITE A PRIORITY NUMBER ON THE ORDER BLANK... AND THE GUY YOU SOLD IS SOMEONE YOU PROBABLY NEVER SAW BEFORE. BUT IT'S NICE BUSINESS... AND YOU CAN GET IT. ELSE WHY AM I WORKING MY FLIPPERS OFF AT THE SHOULDER BLADES? DON'T TAKE MY WORD FOR IT, THOUGH. JUST TRY ANY HOSPITAL, SHIPYARD, CANTONMENT OR WAR PLANT AND SEE FOR YOURSELF!

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